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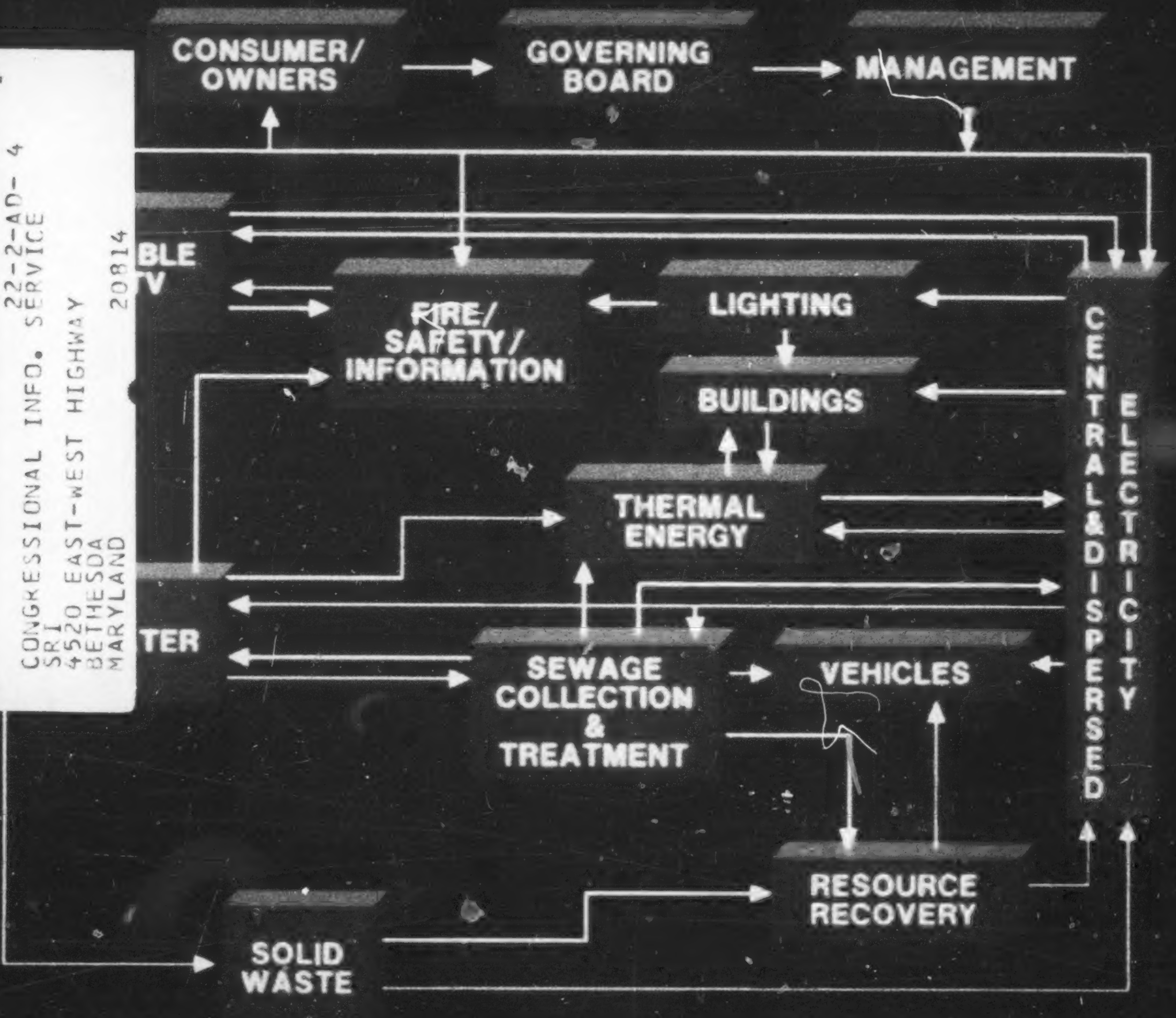
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PUBLIC POWER INNOVATION 1982

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NOVEMBER-DECEMBER 1982
VOLUME 40 NUMBER 6

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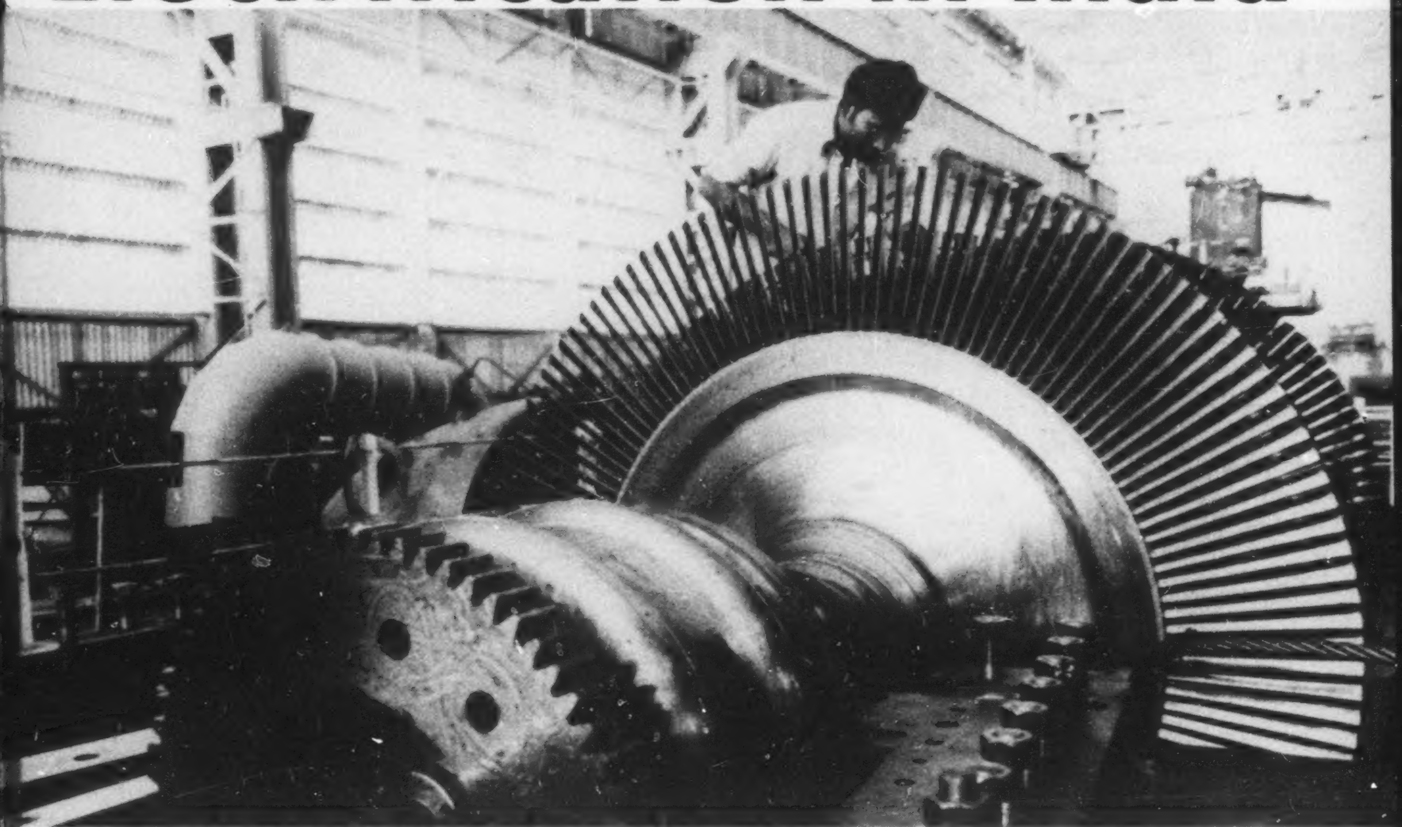
Electrification in India



Electric power equipment such as this turbine rotor is constructed at Bharat Heavy Electricals Ltd. in Hyderabad. PHOTOS COURTESY WORLD BANK

by PETER S. PENNER

INDIA IS 685 MILLION PEOPLE — nearly three times our U.S. population in one-third of our space — packed into cities larger than ours and spread in 570,000 villages of all sizes, shapes and levels of development. Economic development in India ranges from substantially Western standards of living down to a gigantic and growing mass of urban-subsistence poor. Meeting current and future energy needs seems unmanageable. But decentralization at least offers hope.

The Indian people have always exhibited a unique ability to absorb and adopt foreign ideas without sacrificing the strong fabric of their culture. One of the best examples of this is the Indian state itself, which attempts to guide and control the Indian economy from a central government derived from rough-and-tumble democracy. Unpopular policies are frequently greeted by massive strikes, walkouts, speeches, rallies, newspaper editorials and riots. But somehow the nation holds together and develops more or less — usually less — according to the official government five year plan.

Editor's Note: This is the seventh in a series of articles PUBLIC POWER *has asked various authors to prepare regarding electrification in foreign countries.*

In India the twin issues of resource base and population overshadow all political, economic, energy and environmental policy. The government projects that population growth will slow to 1.1 percent by the year 2000, leaving about 800 million Indians in its care. The recent decennial census has shown no slowdown in birth rates indicates this assertion is questionable.

Local Sources Supplied Energy

For centuries, India met its minimal energy needs with nothing more than wood, animal dung and sunlight. No one knows how much of these sources are still used in the villages. Government officials estimate that this "non-commercial" energy use dropped from 68 percent of all energy consumed in 1954 to 44 percent in 1976.

Coal is needed in reliable supply for railroads and power plants; the railroads sometimes have problems delivering sufficient stock to both industries. Coal mining in India is so devoid of mechanization that it is considered a labor-intensive industry.

Ambitious plans are under way to expand offshore petroleum drilling and thereby bolster the country's negative balance of payments. All petroleum-related activities are handled by the state-owned Indianoil company, which has the unique mission of reducing the size of its business rather than expanding it. The company maintains a conservation consulting service authorized to

---

Penner is an electrical engineer who recently traveled in India under the sponsorship of the National Science Foundation and Indian Institute of Management. He is now chief engineer in the governor's office of consumer services in Chicago, Ill.

order any conservation found cost-effective, under threat of cutting off oil supply to uncooperative customers. Motor gasoline is a luxury in India, while kerosene is a necessity for many, so the company strongly depresses gasoline sales to insure adequate supplies of cooking fuel.

Little Interest in Solar

There is an enormous reliance on natural, renewable energy forms in India, but most of this is simply the continuation of age-old patterns of supply and demand. The major renewable energy forms in use are hydroelectricity, draft animal power, animal waste and firewood. There is no substantial interest in "biogas" plants, small digesters which convert animal wastes into high-quality methane usable for cooking or conversion to electricity in a small, portable generator.

About 85,000 of these plants are in place. However, they are not technically advanced devices and are built by contractors who offer little or no marketing and service backup, so no one knows how many are still working. There appears to be little interest in solar and wind power other than small demonstration programs and perfunctory references in government reports.

As part of the nation's highly centralized planning effort, the government planning commission in 1979 issued a "Reference Level Forecast" (RLF). It represents the likely level of demand for energy if no deliberate measures are undertaken to manage energy supply and demand over the next 20 years.

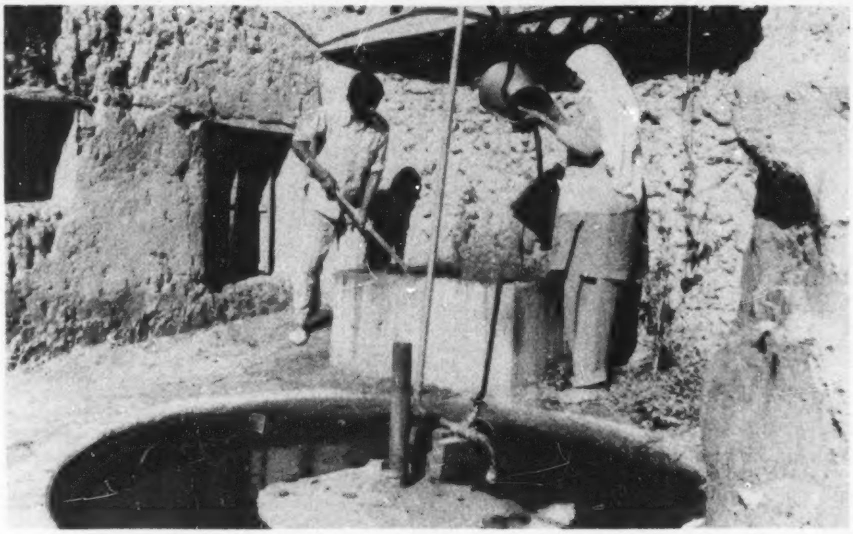
Electricity demand is strong in India, even though installed capacity has increased nearly 20-fold since 1950, from about 1,700 MW to about 30,000 MW. Demand has consistently outpaced supply by about 15 percent, according to government estimates.

Maintenance, Transmission Poor

There are a variety of reasons why the supply side continues to fall short. The main ones are:

1. Average capacity factor at power plants is an abysmal 45 percent system-wide, because of maintenance problems;
2. An inadequate and unreliable transmission system consumes 20 percent of generation, more than double U.S. losses;
3. New projects take much longer to complete than official plans call for and are much more costly than anticipated. (Does that sound familiar?)

Chronic electricity shortages have interesting ramifications. First, the country has extensively studied and implemented methods of allocating power cuts to industrial areas. Secondly, India has become one of the world leaders in demand management, using its central powers to schedule electric use by large customers, notably irrigation systems. As a result, India's load factor is one of the world's highest — 63 percent — and its annual peaking demands are almost entirely due to increased irrigation pumping during the summer and winter dry seasons. Still, many cost-effective conservation measures are not implemented because electric rates for industry are well-subsidized.



Cow dung, urine, night soil and finely chopped fodder remnants are mixed in a tank in Ugala, India, left, to obtain biogas, which is used for household cooking, right. Size of the popular biogas generators ranges from 60 to 5,000 cubic feet capacity.

Figure 1 shows the current fuel configuration of the Indian electric utility industry and capacity additions projected by the year 2000. Supporting data are imprecise, but estimates put fossil generation at about 75 percent coal and 25 percent oil. The power system is so undersized that all capacity added is designed for base load. Total peak demand is about 27,000 MW. The RLF shows peak demand growing to 95,800 MW by the year 2000, with total capacity tripling to 129,700 MW — an ambitious and probably unreachable goal. The central government's less ambitious "Optimal Level Forecast" projects 101,020 installed MW by the beginning of the next century.

'The power system is so undersized that all capacity added is designed for base load.'

At present, there are 640 MW of nuclear capacity on-line, but nuclear provides only 3 percent of total electrical energy. The Ministry of Energy Power Committee has recommended that 5,000 MW of nuclear power be installed by 2000 and hopes that thorium reactors can be a major fuel source thereafter. India has one of the world's largest thorium deposits but little uranium.

Although two minor nuclear incidents have been reported, nuclear power is not yet an environmental issue. However, last year a new era in Indian energy policy began with a letter to the editor of a local newspaper by a group of environmental professors criticizing in detail a proposed government hydroelectric project. Environmental objections to a new power project are unusual and the government has constituted an ad hoc committee to review the complaints of affected landowners.

Utility Organization Vexing

The organization of the Indian electric sector is both elaborate and confusing, and is generally acknowledged to be the source of many of the industry's problems. In 1956, the Industrial Policy Act halted private power companies' growth and reserved further expansion for the State Electricity Boards (SEBs). These boards exist for all but two Indian states and consist of seven members appointed by state governments.

Board members need no special qualifications, nor must they work full-time, but most boards have at least three full-time officials — the chairman, technical member and accounts (finance) member. The SEBs are free to assign members to head activities such as generation, distribution, or administration — although they often do not — and are free to structure their rather large organizations. The SEBs have gradually taken over all but three private utilities and now own more than 70 percent of installed capacity.

'In India the electric power sectors rate and financial structure is a political matter often unrelated to the dictates of rational finance.'

Due to increasing interstate disputes over water rights and transmission lines, the central government created five regional electricity boards to coordinate power planning and development. The national government also created the National Thermal Power Corp., the Atomic Power Authority, the National HydroElectric Power Corp. and one centrally owned regional generation company much like our Tennessee Valley Authority. These four systems have about 7.5 percent of installed capacity. Private companies still own about 5 percent, a handful of municipals own 1 percent and the remaining 14 percent is owned by an array of multistate public ventures. The entire sector is coordinated by the Central Electric Authority, a division of the Energy Ministry, which provides most of the national expansion planning, coordinating, performance monitoring and technical consulting services.

The poor performance of the electric sector's generating plants is generally blamed on the number of organization levels and on the SEBs. A 1980 report of the Ministry of Energy's Committee on Power summarized the problems as follows:

"The major problem areas are inordinate delay in the commissioning of the power projects, the poor utilization of power plant capacity and heavy financial losses. Although these are partly the result of factors outside the control of the boards, they cannot but reflect on the quality of their management. During the last few years, their performance has on the whole deteriorated.

"In personnel terms, the reason is not far to seek. The boards have not been exposed to modern management systems and an achievement oriented and commercial culture. Apart from salary consideration, they do not provide the kind of environment required to attract and retain young and enterprising engineers and experts in other disciplines.

"The industry has been and is even today slow and insensitive in responding to the general public's expectations of a power supply of reasonable quality and reliability and also to consumer complaints. There is a general tendency among the staff to exploit conditions created by their position to a monopoly in power supply in a period of power shortages."

In addition, there is a feeling that the SEBs have grown too large, do not use sufficiently sophisticated planning techniques and are patronage outlets for state governments.

Rate-Setting Highly Political

Obviously, such inefficiency could not survive in a tight fiscal environment. But in India the power sector's rate and financial structure is a political matter often unrelated to the dictates of rational finance.

For political reasons, some industrial, agricultural, and rural electrifications tariffs are set far below actual cost of service. Only two of the 18 SEBs actually received average revenues per kWh greater than their average cost in 1977-78, while all others posted losses of up to 50 percent.

Furthermore, the changeover to unmetered flat-rate tariffs — because many meters are stolen — inevitably encourages overconsumption. SEBs have often been unable to pay their operating expenses plus interest on indebtedness plus depreciation, meaning that one or more went into partial default during a given year.

Power production financing has generally come from three sources: loans from state government (57 percent), private "market borrowings" (25 percent) and internal resources (17 percent). Heavy reliance on state loans makes the SEBs highly vulnerable to state political pressures, usually concerning favored ratemaking and patronage employment. Although a recent law allows states to convert their debt holdings to SEB equity, no state has yet done so.

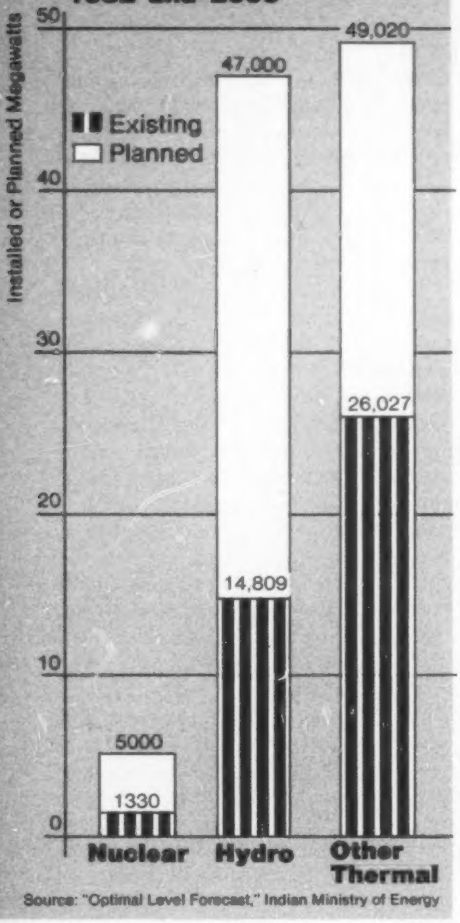
Until 1978, SEBs were required to pay expenses, including depreciation and financing new plants, prior to repaying loans to the state and other investors. With rates heavily subsidized most loans not surprisingly remained partially or completely unpaid. In 1978 interest repayments were given a higher priority than depreciation, so the latter is now suffering the effects of insufficient cash. Also in 1978, the first legal precedent was established requiring electric revenues to at least recover all costs including debt cost.

Although the World Bank and other outside lenders require new Indian projects to attempt to earn an 11 percent return, the sector as a whole now reportedly earns an average return of 7.5 percent against an average 6 percent cost of money. These returns, however, vary widely among states and are often understated due to general disagreement on accounting principles and treatment of state loans. There are no universal accounting procedures and such matters as enforced loans from ratepayers, depreciation rates and the like are all up to the whim of the SEBs involved.

Microcosm of World's Ills

In many respects, India represents a scaled-down version of our world and its dramatic discrepancies in income, resource allocation and economic structure. India is playing out on a national scale the conflicts of resource distribution that must be faced on the international level: population control, income distribution, petroleum dependence, and capital-constrictions on an increased energy supply.

Figure 1 **Republic of India Existing and Planned Generating Capacity, 1982 and 2000**



Source: "Optimal Level Forecast," Indian Ministry of Energy

Two major courses of events are distinguishable more clearly in India than in a world too large to permit one a vantage point.

In the first, population comes under control and the country makes a concerted effort to reduce the imbalances in income distribution. This may mean forsaking the growing investments in defense systems, atomic energy, possibly even electrification, and all areas which primarily benefit the upper classes, in favor of investments in railroads, renewable energy and improved rural technologies.

The second path is characterized by a failure to check population and redress the balance, a tendency that is difficult to reverse when a sizable and powerful upper-middle class is adamant in its belief that further development means advancing its authority and urban lifestyle.

An excellent case in point is the Indian rural electrification program. Running electric lines to remote villages is seldom cost-effective in the short run. However, based on the expectation of important benefits such as irrigation, increased agricultural productivity and an improved rural light-industry base, the government has invested heavily and expects to reach every village by the year 2000.

Meanwhile, there is growing evidence that rural electrification benefits are questionable, particularly in light of the grossly inadequate generation and transmission system. Because irrigation loads are by far the largest peak load, their use is tightly scheduled. Combined with the unscheduled but frequent down-times, many farmers have decided electrification is not worth the trouble and have switched over to diesel pumpsets even though the cost is much higher.

The government calls a village electrified when the first hookup is made. Even though agricultural rates are heavily subsidized, straining the finances of the entire system, only about one customer in 10 can afford to pay hookup costs and install wiring — namely the relatively rich landowners. The municipalities are too poor to afford street lighting.

Yet a growing wealth of information and pilot projects attest to the existence of a number of decentralized, cost-effective, and environmentally sound alternative means of electrifying villages.

A good example of such a project is the "Rural Energy Center" being developed in the Central Indian village of Puna by the well-known Indian scientist A. K. N. Reddy and his colleagues. The center revolves around a village-size biogas generator supplied by the local farmers. Over the course of the day, the gas produced is shuttled to needed areas of the village. In the morning it fires several community cooking rings so hot water and hot breakfasts can be made without long hunts for firewood. The gas is then shuttled to a small converted electrical generator which is first used for pumping up a day's supply of water and then devoted to work-day industrial uses. By night, the remaining gas can be shifted back to the cooking rings (for dinner) and the generator (for electric lights).

Energy is rightly characterized as one of the prime tools of economic development. There is little doubt that an increased energy supply is vital to both economic advancement and the furtherance of education, health and population control efforts. However, the technologies that supply the energy do much to influence the structure of industri[illegible]velopment, employment patterns and lifestyle change. For India and for much of the developing world, the question is really how much of this supply should come in the form of electricity and how much of this electricity should come from large, distant power plants. ✱

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The unusual spray pattern of water at the spillway of the new La Grande power house in Quebec results from a design that slows and broadens the stream of water to minimize bank erosion downstream. PHOTO BY WALTER D. HARRIS

by WALTER D. HARRIS

WITH A FLICK OF A SWITCH Quebec's newest powerhouse roared to life last June, sending another burst of electricity from the burgeoning La Grand hydro complex. Like the power station already operating downstream, the new facility is part of Hydro-Quebec's mammoth effort at harnessing the hydroelectric potential of the Canadian province's vast James Bay territory.

But unlike the first station commissioned in 1979, much of the electricity from the new units will be exported south to the Northeastern United States. Although La Grande complex originally was designed to meet only Quebec's needs, the sudden slowdown in energy demand growth now means Hydro-Quebec must promote electricity exports. Fulfillment of its ambitions for hydro power now hinges on the energy appetite of New York and New England.

The prospect of a greatly expanded energy trade concerns not only Quebec. From the Great Plains to the Atlantic Ocean, Canadian provinces find themselves awash in energy. They look to U.S. needs to justify popular job-creating construction projects.

For Americans, Canadian energy such as Quebec's hydroelectricity is a relatively cheap and abundant alternative to foreign oil. By the end of this year Manitoba is expected to reach a major energy swap agreement with Nebraska and the Dakotas. This year, for the first time, Canadian nuclear power is being imported from a recently commissioned plant in New Brunswick.

In addition, large-scale development of tidal power on the Bay of Fundy is the objective of a pilot project starting up next summer in Nova Scotia. All this new trade in Canadian energy has major U.S. and Canadian electric utilities rewriting their long-range plans.

Geography Transformed

It is hardly exaggeration when Hydro-Quebec, a provincial government-owned firm, boasts of the epic proportions of La Grande complex. Already an underground powerhouse has been carved out of the Canadian Shield's primordial rock. Several rivers have been rerouted. And reservoirs have engulfed the region's terrain — a landscape of bogs, unnamed lakes and scrubby pine barrens known as the tiaga. Six hundred miles north of Montreal, frontier towns sheltered a peak work force of 16,000. When construction ends, the towns will be dismantled and their traces covered by replanted forests.

When Hydro-Quebec first planned the La Grande project it ran into a storm of controversy from Indian tribes and environmentalists. But with the provisional government committed to its favorite project the opposition was quashed by substantial payments to Indians and promises of strict environmental management.

After a decade of work, Hydro-Quebec's subsidiary, Société d'énergie de la Baie James (SEBJ), has completed three quarters of La Grande's first phase. Since the glacier-sheared topography is marked by little relief, dams and reservoirs provide the height needed to exploit La Grande River. Three other rivers — the Eastmain, Opinaca and the Caniapiscau — are being

continued on page 80

Harris is a free-lance writer whose articles on energy have appeared in the CHRISTIAN SCIENCE MONITOR, ECONOMIST *and* ENERGY DAILY.

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channelled into La Grande for added thrust.

Phase 1 generated its first electricity ahead of schedule and its $14.6 billion (Canadian)* price tag is below original cost estimates. The first power station is the biggest hydroelectric plant in North America, with a 5,328-MW capacity. By February 1984 the third station should start up, to complete La Grande phase 1. In all, this phase of construction will add 10,282 MW to Hydro-Quebec's generation.

The system has even bigger plans. La Grande phase 2 calls for construction of four reservoirs to feed five powerhouses with an installed capacity of 3,263 MW coming into service from 1989 to 1993. The French Canadians also want to exploit the Baleine watersheds. In this subarctic region north of the La Grande complex where the tiaga gives way to tundra, Hydro-Quebec plans to build three reservoirs by 1991 and three underground 2,895-MW powerhouses.

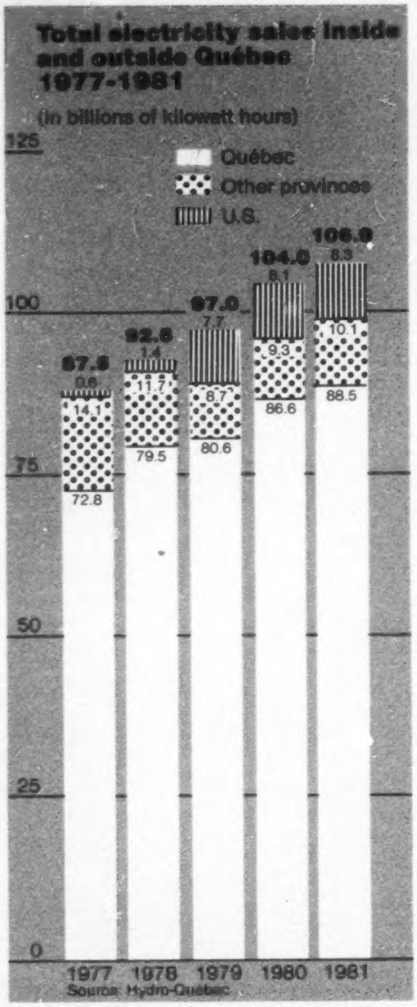
The firm is eyeing yet another area south of La Grande. The Nottaway-Broadbeck-Rupert complex would provide a hefty 7,435 MW from 11 generating stations on the lower reaches of the Broadbeck River. The original timetable had the complex would begin operating between 1992 and 1995. If development at this and other sites in northern Quebec proceeds on schedule, Hydro-Quebec will fully tap the province's hydro potential by the end of the century.

Forecasts Too High

These plans stem from official projections of Quebec's energy demand. In November 1981 the company forecast a 6.1 percent average annual growth in the province's energy consumption through 1998. But sharp jumps in energy prices are holding down demand; the official projections announced in October place annual growth at 3.7 percent, and few observers believed the figure had bottomed out.

Hydro-Quebec officials have been revising the demand forecast and preparing a public announcement on a new long-range plan, including a rate hike request and delay of new construction until 1988. And the system's top-heavy management has been shaken up.

These and other signs suggest that Hydro-Quebec's heyday is over. In 1981, after almost a decade of uninterrupted income growth, its net income decreased more than 25 percent to $558.8 million from $746.2 million the year before. Interest expenses and depreciation on new hydro facilities coincided with depressed electricity demand. In October 1981 the province embarked on an eight-year energy conservation drive to improve home energy efficiency and reduce consumption by 32 percent. Accordingly, the hydro system — Quebec's largest industrial enterprise in terms of assets — cut back 1982 capital expenditures by some $440 million.



PASNY Big Purchaser

Into this scenario stepped New York and New England utilities interested in buying Quebec's surplus power. The news this year was a contract signed in March for Hydro-Quebec to sell the Power Authority of the State of New York (PASNY) up to 111 billion kWh between 1984 and 1997.

PASNY has been importing Quebec hydro since 1978. At present it buys about 8 billion kWh per year, accounting for 20 percent of PASNY sales and 7 percent of New York state's electricity needs. The new contract is significant, though, because it points to a policy shift in Quebec, away from exporting temporary surpluses and toward major long-term foreign sales.

Quebec and New York already benefit from a "diversity power" arrangement complementing each others' needs. During peak demand periods from April to October PASNY has been buying firm power from Quebec, where lowest energy demand comes during the warm months. Under the deal, PASNY paid for hydro power at a rate about 80 percent the cost of oil-fired generation. More recently prices fell, reflecting shared savings of both New York's oil replacement and Quebec's hydro costs. This promise of still cheaper hydro spurred PASNY to sign the long-term power contract.

New York state enjoys a sizeable electricity surplus, but 60 percent of its capacity is oil-fired. Through conservation, coal conversion, and imports from Quebec, the state has trimmed oil-fired generation from 45 percent five years ago to 31 percent last year. The latest contract with Quebec means New York utilities can lessen their oil dependence even faster, and save their customers about $100 million per year.

While New York expands its transmission hookup with Canada, Hydro-Quebec is planning a new link with another previously undeveloped market. During the early 1970s, New England utilities approached Hydro-Quebec about purchasing James Bay hydro. The French Canadians, however, expressed little interest. At the time, the province was bullish on its economic outlook. Hydro-Quebec expected rapid energy growth and insisted on developing hydroelectric power only to meet its own needs. The James Bay project symbolized Quebecois pride.

New England Tying In

In the gloomy 1980s, though, with a slumped economy pointing to energy surpluses for years to come, an interconnection to New England becomes a major concern. This June, Hydro-Quebec and the New England Power Pool (NEPOOL) — consisting primarily of investor-owned utilities but including some municipals — signed a letter of intent to build the tie between their two systems and embark on extensive energy trade.

NEPOOL has applied to New Hampshire and Vermont regulatory agencies for permits to construct a transmission tie to Sherbrooke, Quebec, near the Vermont border. Plans call for 690-MW capacity hookup eventually expanded to 2,000 MW.

The proposed tie is opposed by Yankee landowners unhappy over the prospect of a

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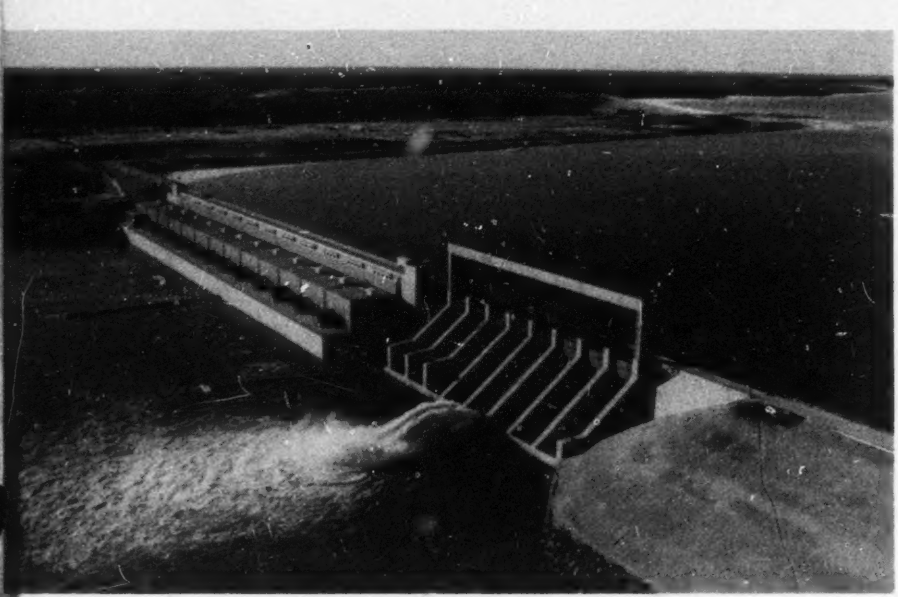
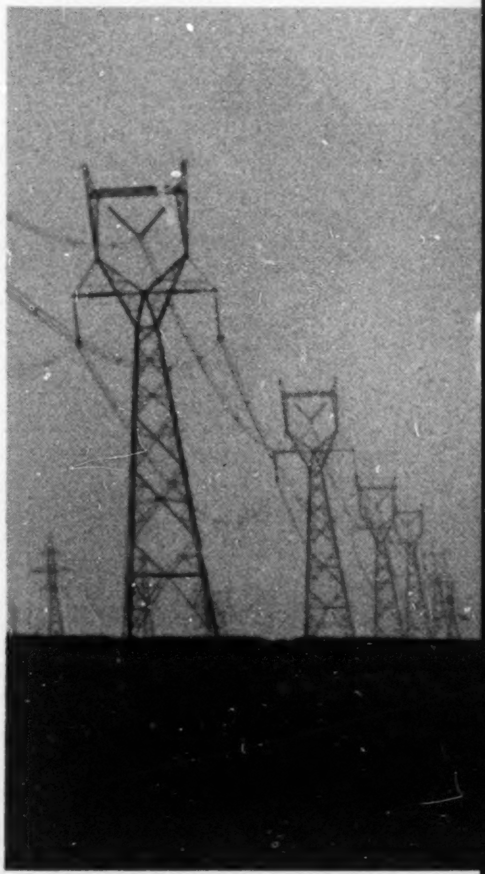
**References to Canadian expenditures throughout this article are in Canadian dollars, each worth about 80 cents in the United States.*





Electricity from Manitoba's largest power plant, the Kettle Generating Station on the Nelson River (top), now flows south to Winnipeg then to Minneapolis, Minn., via a 500-kV transmission line (right). The MANDAN *project would include a similar line from Winnipeg through the Dakotas to Nebraska.* PHOTOS COURTESY MANITOBA HYDRO

transmission line cutting through their woods. To complicate matters, NEPOOL has found the regulatory process in New Hampshire more cumbersome than expected. But NEPOOL expects to have by this winter the permits needed to build the interconnection. Canadian hydro would begin flowing into New England by the mid-1980s.

Construction of the transmission line would easily pay for itself by enabling Quebec and New England to set up an "energy banking" procedure. NEPOOL would, in a sense, deposit its energy in Quebec reservoirs and call up this reserve during peak demand hours. In doing so, NEPOOL could avoid much of the oil-fired generation now used during peak hours.

Besides the energy swap, the interconnection will, of course, provide a major hydroelectricity export route to New England — the agreement sets a target of 33 billion kWh between 1986 and 1997.

Like PASNY, NEPOOL stresses that Quebec's hydro will be used only to reduce oil imports while coal conversion and conservation efforts proceed. The hydro will not replace new American electricity capacity, such as the planned Staten Island coal- and refuse-burning plant or the nuclear units under construction at Seabrook, N.H., and at Millstone in Waterford, Conn. New England now has about a 40 percent capacity surplus, so, with the nuclear power coming on line during the 1980s, the region should be supplied for years to come.

For Quebec, the chief question is whether New England and New York will purchase enough Canadian energy to justify continued hydro-power construction. The American market, once viewed as an outlet for sporadic surpluses, now is recognized as a key factor in Quebec's future.

The increasing importance of hydro exports is already apparent, as the accompanying graph shows. This year, U.S. sales will reach 8.3 billion kWh. By 1984, New York imports will reach 12 billion kWh. And by 1986, New England will begin importing an average of 3 billion kWh annually. Last year alone, Hydro-Quebec's sales to the U.S. and other provinces brought in $375 million — a 25 percent increase over the year before. The new contract with PASNY will bring in about $400 million per year.

MANDAN Project Beneficial

Midwestern public power systems also seek major imports of Canadian hydroelectricity. Wayne Jacobsen, a spokesman for the Nebraska Public Power District, points to the mutual benefits the MANDAN project will provide the one province and three states which gave the project its acronym, Manitoba, the Dakotas and Nebraska.

Construction of a 500-kV AC line from Winnipeg, Manitoba, to Nebraska, with substations in North Dakota and South Dakota, will permit seasonal energy swaps between the regions. Utilities south of northern South Dakota with summer peak load requirements want to draw on the excess summer capacity of their northern neighbors. Dams on Manitoba's Nelson River, whose watershed encompasses much of the area between the Rockies and Hudson Bay, could begin sending their power south by 1988. Construction costs on the American side of the border are expected to reach $686 million, Jacobsen says, but Nebraska's share would still be half the cost of building a new coal-fired plant to meet summer peak loads. Utilities in other Midwestern states besides Nebraska and the Dakotas may join the MANDAN project.

Other Canadian provinces are closely watching this expanding energy trade with the United States. They are pushing their own energy development plans and, like Quebec, their pet projects are in jeopardy as the American market reaches its saturation point.

U.S. imports from the New Brunswick Electric Power Commission are nothing new. What is new this year is the first import of Canadian nuclear power, from the Pointe Lepreau station now coming on stream in New Brunswick. This CANDU (Canadian Deuterium Uranium) facility, on the shores of the Bay of Fundy between Saint John, New Brunswick, and the Maine border, is the first nuclear power station in the Atlantic provinces.

During the 1970s, New Brunswick failed to convince Nova Scotia and Prince Edward Island to share either the power or the financial risk of Lepreau. So NB Power responded to overtures from New England

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The Annapolis Royal tidal power project in Nova Scotia is to be completed next summer.

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utilities. Boston Edison — which last year cancelled its own nuclear power project — has signed up for a block of Lepreau's capacity, as have Massachusetts Municipal Wholesale Electric Co. (MMWEC), Commonwealth Electric Co., a Massachusetts investor-owned firm, and utilities in Maine. The New Englanders have already committed themselves to 335 MW over a six- to nine-year period — more than half of Lepreau's 630-MW capacity. In buying into Lepreau, New England relieved New Brunswick — a small and poor province — of a heavy financial burden.

Now that Lepreau is built, however, construction workers in the area wonder where to find new jobs. NB Power and trade unions are pushing for another unit adjacent to Lepreau 1. This summer, NB Power asked New England utilities about their interest in buying into a second nuclear power plant.

New Brunswickers concede that the second unit will be a lot harder to sell than Lepreau 1. The first station could compete easily with oil-fired generation. But by the time Lepreau 2 would go into operation, much of New England's oil-fired generation will be replaced with coal — a far more formidable competitor.

Transmission Inadequate

Another hitch in expanded energy trade is inadequate transmission capacity, says MMWEC Chairman James E. Baker, president of the American Public Power Association. Massachusetts municipal utilities, such as the one Baker manages in Shrewsbury, would like to buy more Lepreau power. As yet though, Maine utilities have not promised to provide additional transmission capacity needed to move more Canadian power to the Bay State. Despite the hangup, Baker is optimistic about benefits of replacing imported oil with New Brunswick nuclear.

When Canada's National Energy Board approved New Brunswick's nuclear power exports, the decision stirred interest in Ontario. Until construction of Lepreau, all of Canada's nuclear power was in Ontario. Last year that province relied on nuclear for more than one-third of its electricity and by 1990 more than half the demand might be met with nuclear. Ontario Hydro considers its nuclear power the energy resource with the greatest export potential. As utilities in the Northeast convert from oil- to coal-fired generation, Ontario's surplus coal-generated electricity loses its competitive edge.

Since the 1950s Ontario has had major interconnections with New York and Michigan, on which the systems were to rely during emergencies. Over the past decade, though, Ontario expanded the trade with major exports of surplus coal power, from five billion kWh in 1973 to 11 billion kWh last year. Ontario Hydro was negotiating sale of 1,200 MW, via a hookup under Lake Erie, with General Public Utilities, which has paid dearly to replace capacity lost through the Three Mile Island nuclear accident. The deal fell through, which suggests the market may be reaching its saturation point.

Despite the potential, Ontario is cautious in its hopes for more exports. It must now compete with Hydro-Quebec for the New York market. And the escalating cost of nuclear power suggests Ontario may have a hard time finding a U.S. buyer for firm power from nuclear plans yet to be built.

Tidal Power Tested

A similar problem plagues Nova Scotia's drive for large-scale tidal power. Schemes to harness the Bay of Fundy tides have been bandied about since the early 1900s, but none of the ideas has proven economically viable.

A $46 million test of a new tidal power design is under way at Annapolis Royal, Nova Scotia. The Tidal Power Corp. — a provincial government-run firm — hopes completion of the pilot project next summer will boost a proposed $6 billion tidal power dam and station. The plant would be built at the eastern end of the Bay of Fundy where the Minas Basin meets Cobequid Bay. But advocates of tidal power must address the environmental issues raised by their proposals. One problem is the buildup of silt. Another is the effect of water displaced by a huge dam on the tides of the Maine coast.

Experience so far at Annapolis Royal seems to have sparked more interest in applying its cost-saving turbine to low-head river hydro than to large-scale tidal power. In its search for financing Tidal Power Corp. expects no help from Ottawa. Nova Scotian officials expect to have financing proposals ready by the end of the year. But the idea has yet to capture the imagination of possible New England purchasers. A large tidal power station taking 10 years to construct could be ready in the late 1990s. Given the changes in electricity cost, demand and generation in the past decade, power planners on both sides of the border have a difficult task projecting their customers' needs and the best ways to meet them 15 years from now. ✷

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Assistant editor, LORI A. WOEHRLE
Engineering editor, HERBERT I. BLINDER
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MODERNIZE MUNICIPAL BONDS!

by L. MASON NEELY
finance director, East Brunswick, N.J.

APPA EXECUTIVE DIRECTOR ALEX RADIN reported in the July-August 1982 issue of PUBLIC POWER on two disturbing indicators from research conducted by John E. Peterson for the Municipal Finance Officers Association. ("Municipal Financing Threatened," p. 6). I believe a third indicator, which now needs to be recognized, provides an opportunity to improve customer relations through the capital-formation process.

The Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA) will significantly impact the tax-exempt bond market, partly because of a new requirement that all new municipal bonds be in registered form or lose their tax-exempt status. I believe there will be some dislocation of the marketplace after this change goes into effect and would like to suggest a possible solution for the problem.

In 1974, East Brunswick, N.J. approached the Federal Reserve Bank with a proposal to modernize the processing of municipal bonds by directly offering the public mini-municipal bonds in $100, $200, $500 and $1,000 denominations, in checkbook format. From 1974 until the mini-municipals were issued in 1978, East Brunswick attempted to develop an interim step which would facilitate processing and eventually work toward immobilization of municipal bonds.

In September 1978 East Brunswick began direct marketing. East Brunswick and others issued small denominational bonds reported in Table I.

TABLE I—Mini-Municipals Issued, 1978-1979

Jurisdiction	Size of Issue	Principal Denominations	Ownership Form
East Brunswick, N.J. September 1978	$ 529,000	$ 100 200 500	Bearer
State of Massachusetts January 1979	1,000,000	100 500 1,000	Registered
Framingham, Mass. March 1979	600,000	1,000	Bearer
Ocean County, N.J. April 1979	1,000,000	100 500	Bearer
Salt River Agricultural Improvement & Power Districts of (Phoenix) Ariz. October 1979	1,300,000	500	Bearer
Stonington, Conn. December 1979	500,000	Multiples of 100 up to 5,000	Registered
Rochester, N.Y. December 1979	500,000	500	Bearer

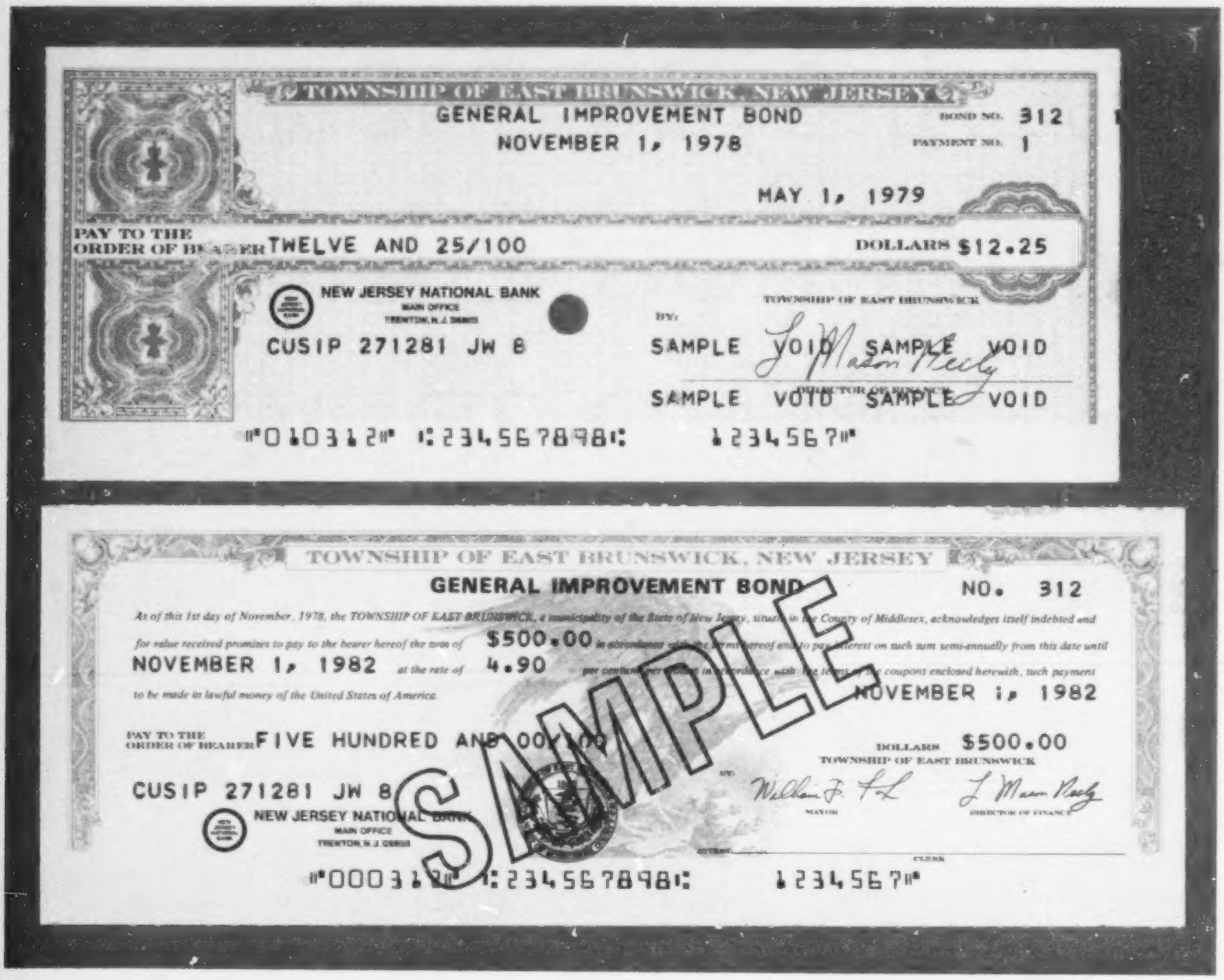
'Henry Ford didn't shoot all the horses when he began mass production of automobiles.'

Direct marketing of mini-municipals, although small in total volume, did not go unnoticed. The prospect of opening up the small-investor market for municipals concerned various financial institutions. Disintermediation of funds would threaten local savings institutions if mini-municipals became a major method of capital formation.

Except at the Salt River Project, small denominational bonds were short-lived. The rapid increase in interest rates, coupled with the all-savers certificate legislation, eliminated the gap between small and large investors. All-savers certificates met the need of small investors; the average investor could acquire tax-exempt income through local savings and loan institutions.

East Brunswick did not enter the mini-municipal market believing all or a major portion of its capital needs would be met there. Marketing of small denominations directly to the public resulted from a broader goal established in 1974 when East Brunswick suggested changing the bond printing and distribution process.

If municipal bonds were printed with magnetic ink character recognition coding (MICR), as checks are, then both the bonds and coupons could be treated as a cash item and processed automatically. Using this common technology would eliminate the small envelopes stuffed with small coupons, stuffed in larger envelopes, then transmitted in boxes to various paying agents and on to the issuer. The use of MICR would eliminate the manual inspection process, which is labor intensive, and charge accounts automat-



TOWNSHIP OF EAST BRUNSWICK, NEW JERSEY
GENERAL IMPROVEMENT BOND
NOVEMBER 1, 1978
BOND NO. 312
PAYMENT NO. 1
MAY 1, 1979
PAY TO THE ORDER OF BEARER TWELVE AND 25/100 DOLLARS $12.25
NEW JERSEY NATIONAL BANK
MAIN OFFICE
TRENTON, N.J.
CUSIP 271281 JW 8
TOWNSHIP OF EAST BRUNSWICK
BY:
SAMPLE VOID SAMPLE VOID
SAMPLE VOID SAMPLE VOID
L Mason Neely
DIRECTOR OF FINANCE
010312 234567898 1234567

TOWNSHIP OF EAST BRUNSWICK, NEW JERSEY
GENERAL IMPROVEMENT BOND NO. 312
At of this 1st day of November, 1978, the TOWNSHIP OF EAST BRUNSWICK, a municipality of the State of New Jersey, situated in the County of Middlesex, acknowledges itself indebted and for value received promises to pay to the bearer hereof the sum of $500.00 *in accordance with the terms hereof and to pay interest on such sum semi-annually from this date until* NOVEMBER 1, 1982 *at the rate of* 4.90 *per centum per annum in accordance with the terms of the coupons enclosed herewith, such payment to be made in lawful money of the United States of America.* NOVEMBER 1, 1982
PAY TO THE ORDER OF BEARER FIVE HUNDRED AND 00/100 DOLLARS $500.00
TOWNSHIP OF EAST BRUNSWICK
BY:
L Mason Neely
MAYOR
DIRECTOR OF FINANCE
CUSIP 271281 JW 8
NEW JERSEY NATIONAL BANK
MAIN OFFICE
TRENTON, N.J.
ATTEST:
CLERK
000312 234567898 1234567
SAMPLE

East Brunswick, N.J., minibond holders cash their coupons in banks or food stores just like checks, thanks to simplified procedures and magnetic coding. The Salt River Project, Phoenix, Ariz., and East Brunswick, N.J., found local citizens want to buy municipal bonds in denominations of $1,000 or less.

ically, thereby providing for automatic reconcilation. Additionally, the audit trail developed through the MICR-encoding could eliminate special-handling postage from bank to bank to issuer.

Communities Supported Mini-Bonds

In East Brunswick, mini-municipals were used to finance a public works facility. The mini-municipals permitted community support through direct bond purchase, along with a tax shelter for the same people paying property taxes in the municipality.

The Salt River Project used mini-municipals in a different way. Through direct mailing to customers, $500-denomination mini-municipals were offered. The October 1979 sale was followed by an October 1980 offering of $2.5 million and an October 1981 offering of $9.5 million.

The sales improved customer relations; 80 percent of the $500-denomination bonds were purchased by Salt River Project cus-

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SRP Customers Like Minibonds

THE PUBLIC POWER SYSTEM which began offering minibonds in 1979 will offer $15 million — its fourth issue — to small investors this year.

"We've been inundated with calls about when we will make another minibond offering," said Mark Bonsall, assistant treasurer of the Salt River Project (SRP), Phoenix, Ariz.

"You develop a following," said Bonsall. "It took three issues to develop this much interest."

Bonsall said about 5,000 persons in the Phoenix area, including many SRP employees, buy the $500-denomination bonds, choosing either five-year or 10-year maturity. The tax-free interest on the offerings has ranged from 6 percent to 10.75 percent.

"The program certainly has been a benefit to SRP," said Bonsall. "Your constituency invests in you."

Bonsall said SRP issues the minibonds along with traditional offerings of $5,000-denomination bonds; both are priced the same. He said SRP uses standard registered bonds, rather than immobilized book-entry bonds as suggestd by Neely. However, Bonsall said SRP probably would offer book-entry bonds eventually.

"We've investigated, and use of depositories as Neely suggests can make the immobilized minibond competitive."

Public power systems in California, Oklahoma and Florida have expressed interest in the Salt River project's minibond program, said Bonsall. His office telephone number is 602/273-5702. VIC REINEMER

Local systems budget $5.2 billion for 1983 plant work

by JEANNIE KILMER

contributing editor, PUBLIC POWER, and APPA manager of statistics and data processing

THE NATION'S LOCAL PUBLICLY OWNED electric utilities are budgeting $5.2 billion for new plant additions and improvements in 1983 — an increase of 12 percent over the $4.64 billion they reported spending this year.

A year ago, in PUBLIC POWER's annual survey of spending plans, the local public power systems indicated they expected to spend about $6 billion. The difference between 1982 projected and actual total expenditures results from smaller nuclear generation expenditures than projected. The systems reported spending $1.48 billion on nuclear generation in 1982, instead of the $3.08 billion forecast in 1981. Most of the cutback in nuclear expenditures is accounted for by one system.

The PUBLIC POWER spending figures are for municipal electric utilities and other local publicly owned systems and do not include federal power agencies, rural electric cooperatives or private power companies.

Spending for overhead transmission is estimated to go up 66.8 percent in 1983 over 1982, due in most part to increased expenditures by one joint action agency. Total generation is estimated to rise 12 percent in 1983, largely due to plant additions for coal and hydro generation.

PUBLIC POWER's survey of spending plans includes reports from hundreds of municipal and other local publicly owned electric utilities, estimated to represent 59 percent of the total local public power segment of the electric utility industry on the basis of number of customers served. The reports have been projected to cover all local publicly owned systems. ✹

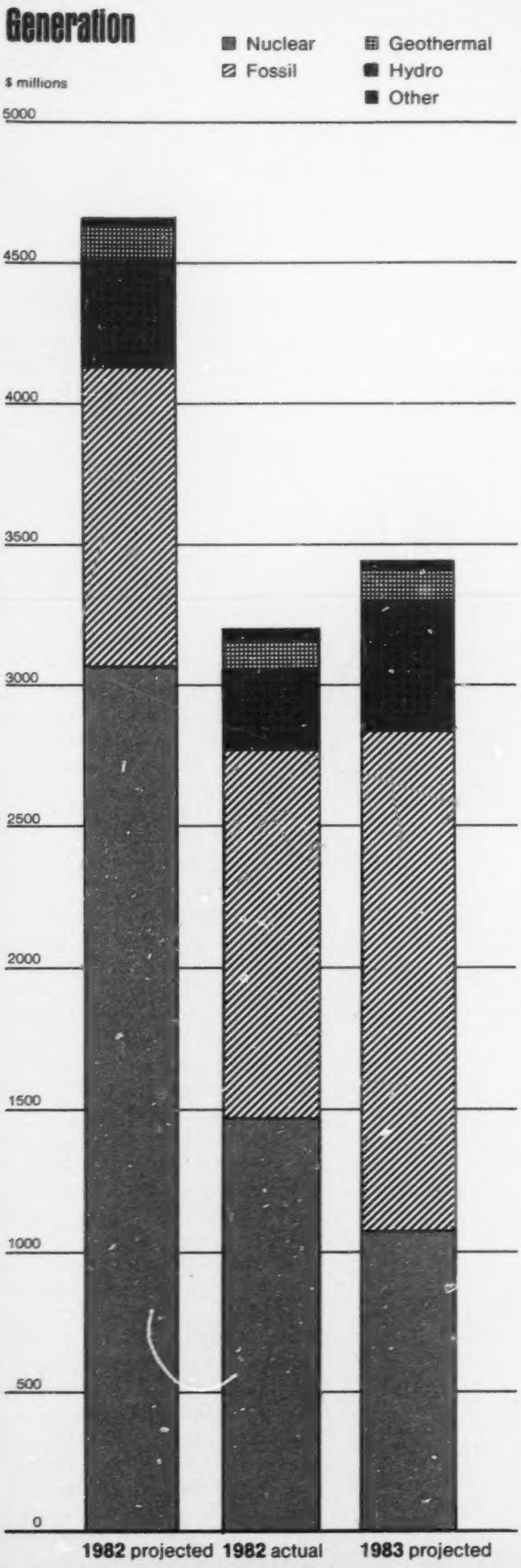
LOCAL PUBLIC POWER SYSTEM SPENDING, 1982-83

	1982 *Projected**	1982 *Actual*	1983 *Projected*	% Change 1982-1983
Distribution				
Overhead below 33 kV	$ 442,825,044	$ 371,879,085	$ 380,664,909	2.4
Underground below 33 kV	216,769,600	152,290,617	165,897,493	8.9
Total Distribution	659,594,644	524,169,702	546,562,402	4.3
Transmission				
Overhead above 33 kV	177,819,923	313,142,620	522,366,375	66.8
Underground above 33 kV	6,184,032	11,220,927	10,088,436	(−10.1)
Total Transmission	184,003,955	324,363,547	532,454,811	64.2
Conservation and Load Management	**	80,003,486	133,227,839	66.5
Substations	346,171,597	291,513,486	343,379,105	17.8
Other T&D	124,318,005	198,017,754	200,334,093	1.2
Total T&D	1,314,088,201	1,418,067,975	1,755,958,250	23.8
Generation				
Steam: Coal	904,702,790	1,179,263,842	1,638,914,666	39.0
Oil	56,924,763	34,801,049	40,214,445	15.6
Gas	24,954,831	58,213,915	64,361,136	10.6
Nuclear	3,077,398,000	1,484,908,076	1,062,034,000	(−28.5)
Biomass	689,000	13,705,000	4,928,000	(−64.0)
Total	4,064,669,384	2,770,891,882	2,810,452,247	1.4
Engine: Oil-Fired	38,615,192	278,864	6,017,415	2,057.8
Gas-Fired	87,514	159,074	160,000	0.6
Dual-Fuel	10,127,808	16,197,263	11,994,870	(−25.9)
Gas Turbine	16,815,102	24,506,534	20,279,341	(−17.2)
Combined Cycle	30,535,377	15,975,071	2,199,235	(−86.2)
Hydro	374,317,502	281,477,192	461,200,498	63.9
Geothermal	150,697,903	107,492,600	111,392,000	3.6
Wind	634,000	64,000	30,000	(−53.1)
Other (unspecified)	8,954,000	3,355,000	17,292,500	415.4
Total Generation	4,695,453,782	3,220,397,480	3,441,018,106	6.9
GRAND TOTAL	6,009,541,983	4,638,465,455	5,196,976,356	12.0

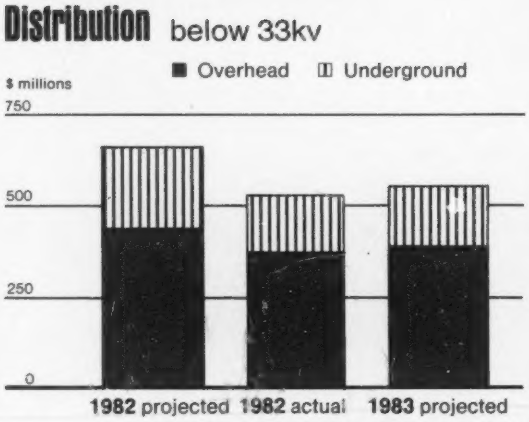
* These figures have been revised. The method of calculating them has been changed due to the increasing number of joint-action agencies.

** Data not collected

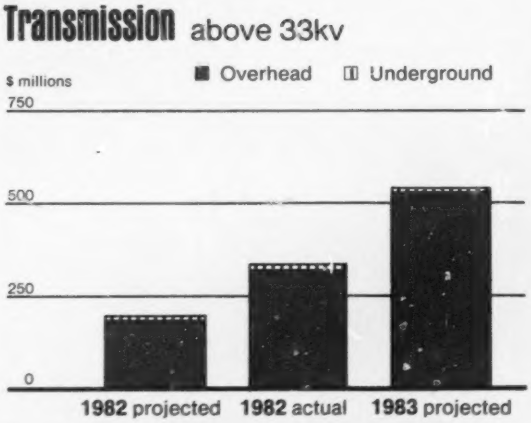
Local Public Systems Plant Additions and Improvements



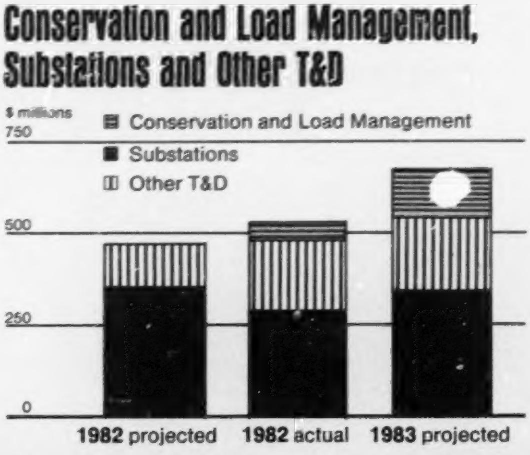
Generation



Distribution below 33kv



Transmission above 33kv



Conservation and Load Management, Substations and Other T&D

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tomers. The need of some small investors to regain cash easily and quickly was addressed by permitting a purchaser to redeem the bond after 30 days. Redemption was par less a small fee to cover postage and handling costs. As of last fall less than $200,000 of the $13.3 million issued had been redeemed.

Bond Base Shrinking

The reduction of federal income taxes will continue to decrease the attractiveness of municipal bonds and shrink the base to which underwriters turn when marketing these bonds. The ability of municipals to find a new market will relate directly to the permissiveness of the federal controls of industrial development bonds, federal involvement in the capital market and housing bonds. Although inflation has shifted the number of individuals in various tax categories it has not significantly increased the number of investors for tax-exempt income.

Reduced inflation and lowering of interest costs will have some benefit for tax-exempt markets as it will on all capital formation markets. But the question of competition between instruments will continue to exist.

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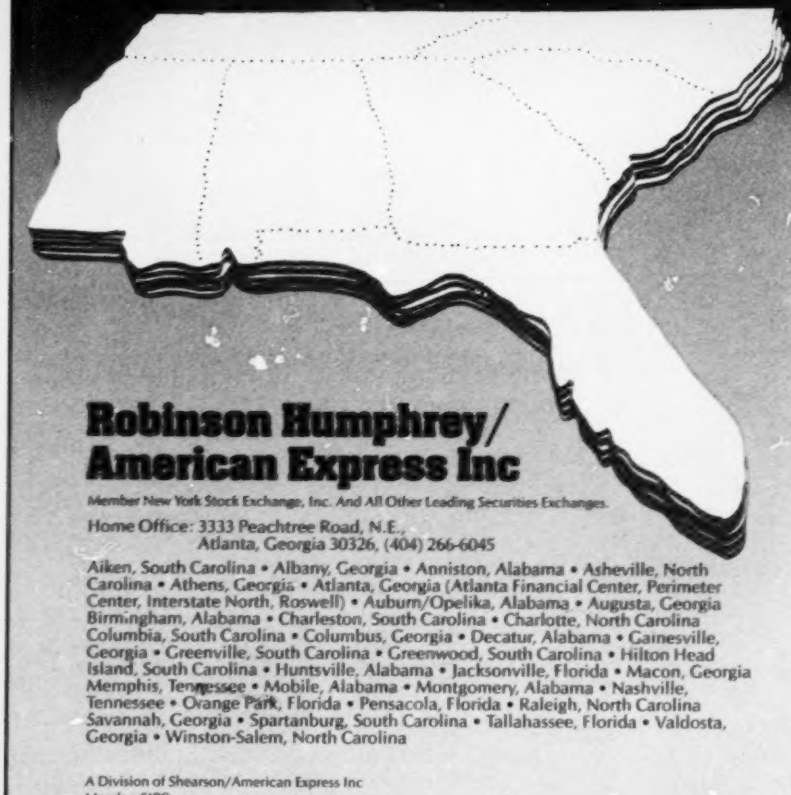

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Now that TEFRA has required that all new municipal bonds be registered, the question of form, the permissiveness of state legislation and individual preferences of issuers must be reconsidered. The form of the instrument can be changed. The verbiage can be reduced. The method of printing required statements can be altered. There is no longer need for expensive intaglio printing using 80 to 100 percent rag paper. The closing process and use of the signature company may no longer be necessary.

Abolish Certificates

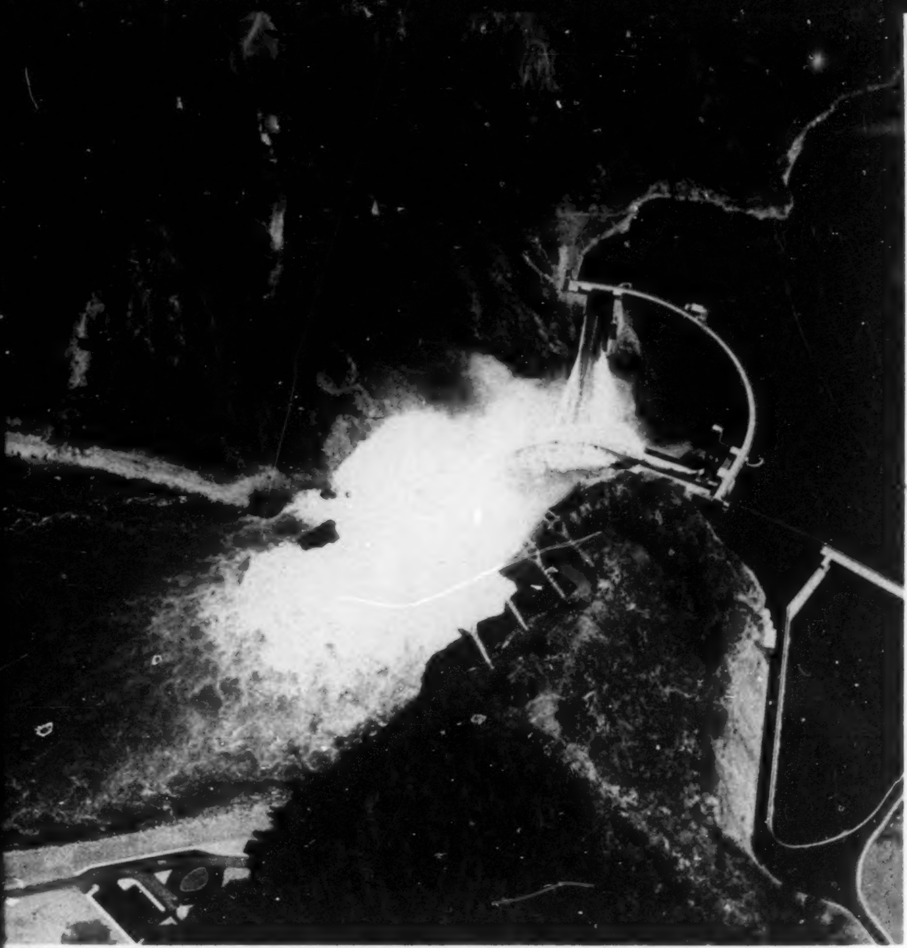
I suggest all of this process be eliminated and we go to book entry *without* certificate registration. East Brunswick encourages the underwriting market to request book entry, without certificates.

This will eliminate the need for the traditional $5,000 statement of principal and will bypass the transfer agent, signature company and bank note printing company. Why? Because Depository Trust Co. of New York and regional depositories can make book-entry transactions for hundreds of banks and brokers throughout the country. These institutions deal with many of the individuals active in the municipal market.

Let me suggest some of the savings that can result if municipal bonds can become immobilized, (as many billions of dollars worth of stock are):

- The cost of printing certificates will be eliminated;
- The cost of closings at the signature company will be eliminated;
- Delivery and closings can take place in five days as opposed to the normal 30-day period. This means funds can be put to work faster;
- The risk of poor delivery, which can result in incorrect processing by a transfer agent will be eliminated; and
- Bond processing, validation, and storage will be unnecessary.

There is no reason why we cannot develop this alternative, simple processing of municipal bonds along with the traditional, laborious, costly method. Two methods of transportation evolved along side each other; Henry Ford didn't shoot all the horses when he began mass production of automobiles. The new legislation is going to force a new type of instrument into the municipal marketplace. The endless flow of paper and the antiquated system of clipping coupons and placing them in envelopes will soon be terminated. Access to the marketplace will in large measure depend upon how issuers prepare. Pitfalls abound and financial advisory services will increase with everyone trying to tell us how to avoid registration problems. I suggest we avoid the problem through immobilization of municipal bonds. ✷



Boundary Dam, owned by Seattle (Wash.) City Light, produces about 350 MW each year, but such large, inexpensive energy sources can no longer be duplicated, even in the hydro-rich Northwest. Now careful long-range planning is needed to meet — and curb — growing demand.

from our current 950-MW load to an anticipated 1,351-MW load in 2002. Another bleak and expensive prospect was our seasonal load imbalance. Our winter load, now 15 percent higher than our annual average, will be 30 percent higher in another 20 years. But hydro, for decades our all-purpose answer, can't meet our winter bulge unless the run-off from one winter's frozen streams and snow packs can be stored and released the following winter. Hydro sites able to support large reservoirs have long since been exhausted.

Still other problems were posed by an array of moving targets: substantial variations among the region's forecasts; changing technologies, timetables and uses; sites yet to be located; a regional power plan yet to be announced; a BPA contract still being negotiated; and BPA rate increases greatly exceeding our own.

After developing four different 306-MW mixes, none of which gave us a reserve margin, we faced up to the need for more flexibility to deal with this planners' nightmare of unknowns. We developed a larger target: 450 MW. And we began meeting it with the city's designated priority — conservation.

Conservation Helps Manage Growth

In the past five years, conservation has already helped check our load growth, and the City Council has approved programs expected to shave another 198 MW from future loads. Much of these expected savings will come from fairly predictable sources, ranging from a 3-MW street lighting program to more than 50 MW from energy codes covering new construction.

What sets Seattle apart is its decision to plug existing leaks in older structures with the country's toughest mandatory service requirements. They are triggered by requests for new and enlarged electric service — among residential customers, if the new connection is for electric heat; among commercial customers, for any reason. Residential standards have already been in effect for two years; commercial standards take effect in April.

Before gaining the utility's hookup approval, owners of converting residences must now insulate ceilings, walls and windows, floors over unheated spaces, crawl spaces, hot-water ducts and water heaters. Commercial buildings constructed before 1980 (not covered by the energy code) will be required to meet hot-water and lighting-efficiency standards. The most stringent is a lighting power budget limiting wattage per square foot to an allowance determined by type of occupancy. If the new connection serves electric heat, an energy analysis is required.

The new standards are already reducing projected load in two ways: by slowing down the rate of electric heat conversions and by requiring less electricity for each new space-heating use. Total electricity used in each converting residence is approximately 16 percent less than expected without the efficiency improvements. And, although the utility's load forecast is still characterized by a winter bulge, the new standards will somewhat flatten its mushroom shape.

Finding out how much more conservation could be squeezed from our service area required an exhaustive study. This assessment turned up 178 additional MW.

Another assessment turned up 172 MW that could come from alternative generation (cogeneration, small hydro, solid waste, biomass, geothermal and wind), three-quarters of it no more costly than the Creston coal plant. Finally, we recommended 100 MW of some kind of thermal energy — possibly from the coal plant, possibly from other sources. The recommendations and a summary of the backup work are described in six documents; the title of the summary volume is *Energy Options*.

If we hit the target, we can reduce our BPA purchases from 25 percent of our current load to 11 percent of a larger load. If we exceed our goal, we will have a revenue source or a contribution to make to the resource pool the Northwest will need in the 1990s and beyond. Whatever the case, we will be adding to our customers' equity in a system in which they already have a $600-million investment. This year we will test the effect of energy options on our projected deficit, singly and in combinations to determine desirable resource mixes.

In the meantime, the same planners who were earlier inundated with paper are now visiting industries with cogeneration potential and tramping the countryside to inspect small hydro sites. Their examination of a variety of projects is, or will be, mirrored throughout the region, for few of our current energy possibilities will have major load impacts individually. Any major impact must come from many separate options, individually located, chosen and developed, all with risks and none with money-back guarantees. These kinds of preparation and risk go hand in hand with the commensurate benefits of an energy future that is selected instead of imposed — a future that is, in other words, in the tradition of public power. ✱

1983

publicpower

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U.S. ELECTRIC UTILITY STATISTICS

Additions and corrections to be included in the next directory should be sent to PUBLIC POWER Directory, 2301 M St. N.W., Washington, D.C. 20037.

Local public system statistics are from the American Public Power Association. Private company figures are from the Energy Information Administration. Rural electric data are from the Rural Electrification Administration. Federal power statistics are compiled from annual reports of the federal power marketing agencies and data reported to APPA.

NUMBER OF SYSTEMS	Private power companies	216
	Local publicly owned systems, including municipals, public utility districts and state and county systems	2,183
	Publicly owned joint action agencies	52
	Rural electrics (including 870 distribution co-ops) and 55 generation and transmission co-ops	925
	Federal power agencies	12
	TOTAL	3,388

		1980	1980 %	1981	1981 %
NUMBER OF CUSTOMERS	Local public systems	12,467,700	13.5	12,718,572	13.5
	Private	70,620,300	76.2	71,885,000	76.1
	REA borrowers	9,523,600	10.3	9,844,319	10.4
	Federal	13,300	.01	14,115	.01
	TOTAL	92,624,900	100	94,462,006	100
KWH SALES (to ultimate customers, in millions of kWh)	Local public systems	315,330	14.6	320,432	14.7
	Private	1,620,146	75.2	1,634,217	75.1
	REA borrowers	146,534*	6.8	148,880	6.8
	Federal	72,760	3.4	71,358	3.3
	TOTAL	2,147,707	100	2,174,887	100
ELECTRIC OPERATING REVENUES (in thousands of dollars)	Local public systems	$ 12,224,000	10.8	$ 14,378,030	10.8
	Private	87,062,000	76.9	102,301,091	76.6
	REA borrowers	9,707,000	8.6	11,795,376	8.8
	Federal	4,238,000	3.7	5,015,287	3.8
	TOTAL	$113,231,000	100	133,489,784	100
NET ELECTRIC PLANT INVESTMENT (in thousands of dollars, does not include nuclear fuel)	Local public systems	$ 34,100,000	11.9	$ 38,489,719	12.1
	Private	207,555,000	72.4	227,276,647	71.3
	REA borrowers	23,892,000	8.3	29,491,653	9.3
	Federal	21,100,000	7.4	23,477,491	7.4
	TOTAL	$286,647,000	100	$318,735,510	100
INSTALLED CAPACITY (in thousands of kW)	Local public systems	67,568	10.9	69,418	10.8
	Private	476,979	77.1	484,983	75.6
	REA borrowers	15,425	2.5	20,589	3.2
	Federal	59,078	9.5	66,374	10.3
	TOTAL	619,050	100	641,364	100
KWH GENERATION (in millions of kWh)	Local public systems	204,880	9.0	247,917	10.5
	Private	1,782,545	78.0	1,785,500	75.8
*revised	REA borrowers	63,557	2.8	77,231	3.3
	Federal	235,051	10.3	245,696	10.4
	TOTAL	2,286,033	100	2,356,344	100

20 LARGEST STATE & LOCAL PUBLICLY OWNED ELECTRIC SYSTEMS

ELECTRIC CUSTOMERS SERVED—1981

1. Los Angeles (Cal.) Department of Water and Power	1,219,041
2. Puerto Rico Electric Power Authority	1,002,342
3. San Antonio (Texas) City Public Service Board*	355,297
4. Sacramento (Cal.) Municipal Utility District	343,159
5. Salt River Project, Phoenix, Ariz.*	330,251
6. Memphis (Tenn.) Light, Gas and Water Division	309,707
7. Seattle (Wash.) City Light	293,589
8. Jacksonville (Fla.) Electric Authority*	227,866
9. Omaha (Neb.) Public Power District	215,926
10. Nashville (Tenn.) Electric Service	208,094
11. Austin (Texas) Electric Utility	173,192
12. Snohomish County Public Utility District, Everett, Wash	150,040
13. Chattanooga (Tenn.) Electric Power Board	125,707
14. Knoxville (Tenn.) Utilities Board	125,414
15. Nebraska Public Power District, Columbus, Neb.	108,393
16. Tacoma (Wash.) City Light	106,265
17. Colorado Springs (Colo.) Department of Public Utilities	104,292
18. Orlando (Fla.) Utilities Commission	86,124
19. Anaheim, City of, Cal.*	84,709
20. Clark County Public Utility District, Vancouver, Wash.	81,956

NET ELECTRIC PLANT—1981

1. Power Authority of the State of New York	$3,300,007,000
2. Salt River Project, Phoenix, Ariz.*	2,843,246,354
3. Los Angeles (Cal.) Department of Water and Power	2,447,837,755
4. San Antonio (Texas) City Public Service Board*	1,515,056,000
5. Nebraska Public Power District, Columbus, Neb.	1,427,501,000
6. Puerto Rico Electric Power Authority	1,326,163,000
7. South Carolina Public Service Authority*	1,186,172,278
8. Austin (Texas) Electric Utility	981,686,272
9. Omaha (Neb.) Public Power District	904,395,250
10. Municipal Electric Authority of Georgia	875,897,836
11. Sacramento (Cal.) Municipal Utility District	844,976,073
12. Chelan County Public Utility District, Wenatchee, Wash.	611,275,897
13. Jacksonville (Fla.) Electric Authority*	456,031,162
14. Lower Colorado River Authority, Austin, Texas	441,842,820
15. California Department of Water Resources	426,945,052
16. Seattle (Wash.) City Light	420,071,880
17. Grand River Dam Authority, Vinita, Okla.	418,950,234
18. Tacoma (Wash.) City Light	407,400,400
19. Massachusetts Municipal Wholesale Electric Co.	399,069,000
20. Kansas City (Kan.) Board of Public Utilities	289,645,169

KWH SALES—1981

1. Power Authority of the State of New York	39,671,062,000
2. Los Angeles (Cal.) Department of Water and Power	19,654,769,126
3. Grant County Public Utility District, Ephrata, Wash.	12,718,801,000
4. Salt River Project, Phoenix, Ariz.*	12,026,474,000
5. Puerto Rico Electric Power Authority	10,836,885,000
6. Chelan County Public Utility District, Wenatchee, Wash.	10,615,210,377
7. South Carolina Public Service Authority*	8,869,677,890
8. Memphis (Tenn.) Light, Gas and Water Division	8,566,272,086
9. Nebraska Public Power District, Columbus, Neb.	8,460,984,000
10. Seattle (Wash.) City Light	8,457,121,000
11. San Antonio (Texas) City Public Service Board*	7,943,009,000
12. Nashville (Tenn.) Electric Service	7,418,857,287
13. Sacramento (Cal.) Municipal Utility District	7,007,367,000
14. Omaha (Neb.) Public Power District	6,260,741,000
15. Jacksonville (Fla.) Electric Authority*	5,771,433,000
16. Austin (Texas) Electric Utility	5,604,345,956
17. Municipal Electric Authority of Georgia	5,170,011,000
18. Lower Colorado River Authority, Austin, Texas	5,023,987,733
19. Chattanooga (Tenn.) Electric Power Board	4,899,054,384
20. Tacoma (Wash.) City Light	4,709,421,000

*Fiscal year not coincident with calendar year.

ELECTRIC REVENUES—1981

1. Los Angeles (Cal.) Department of Water and Power	$1,221,557,007
2. Puerto Rico Electric Power Authority	1,166,723,000
3. Power Authority of the State of New York	974,133,000
4. Salt River Project, Phoenix, Ariz.*	534,357,000
5. Jacksonville (Fla.) Electric Authority*	412,800,000
6. San Antonio (Texas) City Public Service Board*	391,564,000
7. Memphis (Tenn.) Light, Gas and Water Division	369,507,000
8. Nashville (Tenn.) Electric Service	306,448,451
9. Austin (Texas) Electric Utility	286,068,513
10. Nebraska Public Power District, Columbus, Neb.	273,886,000
11. South Carolina Public Service Authority*	246,346,151
12. Omaha (Neb.) Public Power District	222,546,000
13. Chattanooga (Tenn.) Electric Power Board	204,867,690
14. Sacramento (Cal.) Municipal Utility District	194,802,213
15. Lower Colorado River Authority, Austin, Texas*	163,258,314
16. Knoxville (Tenn.) Utilities Board	161,232,003
17. Municipal Electric Authority of Georgia	160,876,428
18. Orlando (Fla.) Utilities Commission	147,335,228
19. Seattle (Wash.) City Light	135,948,405
20. Lansing (Mich.) Board of Water and Light	107,200,417

Sources: Annual reports and data reported to American Public Power Association.

PUBLIC POWER Directory

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PUBLIC POWER'S Directory of Local Publicly Owned Electric Utilities includes more than 2,100 listings of local publicly owned electric systems in the United States, organizations of these utilities, federal power agencies, major Canadian electric utilities and, for the first time, a directory of publicly owned cable communications systems.

Included in the directory are: municipal electric systems; public utility districts; public power districts; other types of state and county electric systems; organizations which include local publicly owned electric systems; and federal power agencies. *Not included* in this directory are: privately owned electric power companies and rural electric cooperatives.

Listings cover the following information where available: name of utility; address, including mailing zip code; telephone number, including area code and local number; chief executive officer, usually superintendent (supt.) or manager (mgr.); number of meters (met.) served; generation (gen.) by type, including steam, gas turbine, internal combustion engine (eng.) and hydroelectric (hydro) in kilowatts of capacity (kW), usually nameplate ratings, and total generation for the latest available year in kilowatt-hours (kWh); power purchased (pur.) at wholesale or sold for latest full year, either calendar or fiscal, in kilowatt-hours; annual electric revenues (rev.) for the latest available year; and year system was established. A small zero (0) at the end of an entry means the principal data therein was obtained in 1980. A small one (1) means the principal data was obtained in 1981. A small two (2) denotes data obtained in 1982.

Local publicly owned electric utilities are listed alphabetically by states. Municipal systems are listed by the name of the city. Other types of local public power systems—public utility districts, public power districts and other state- and county-owned electric systems—are listed alphabetically by the name of the utility. Washington state public utility districts are shown by the name of the county served.

The directory lists local publicly owned electric utilities in 49 states, the Canal Zone, Puerto Rico, Virgin Islands, Guam and American Samoa. There are no local public systems in Hawaii.

Numbers of local publicly owned electric systems by states are shown in the right-hand column.

Nebraska, the only state in which all electric utility service is consumer-owned—provided by either publicly owned or cooperative systems—leads the nation with 157 local publicly owned utilities. In addition 217 other communities in Nebraska own municipal electric systems which are operated under lease agreements by Nebraska Public Power District and 22 other communities lease their municipal electric utilities to Loup Power District, so the state has a total of 396 local publicly owned electric utilities.

Other leading states in numbers of publicly owned systems are: Iowa, 140; Kansas, 127; Minnesota, 125; Wisconsin, 84; Ohio, 83; Missouri, 82; Texas, 75; North Carolina, 72; Indiana, 72; and Oklahoma, 69.

The table shows that four states have more than 100 local publicly owned electric utilities, and 14 states have 50 or more local publicly owned power systems.

This is PUBLIC POWER'S twenty-second annual directory, and a number of changes from the previous directories, including the numbers of systems shown for several states and the national total, reflect corrections from the earlier listings as well as changes during the past year.

Although PUBLIC POWER is responsible for the directory, the editors acknowledge with gratitude the many sources of information which have made it possible to compile the most accurate listing of local publicly owned electric utilities ever published.

These sources include hundreds of local publicly owned utilities which submitted information to PUBLIC POWER on a survey form; records and files of the American Public Power Association, the national service organization of the local publicly owned electric utilities; officials of regional and state associations, joint action agencies and the federal government; and many individual officials of local publicly owned electric utilities. ✷

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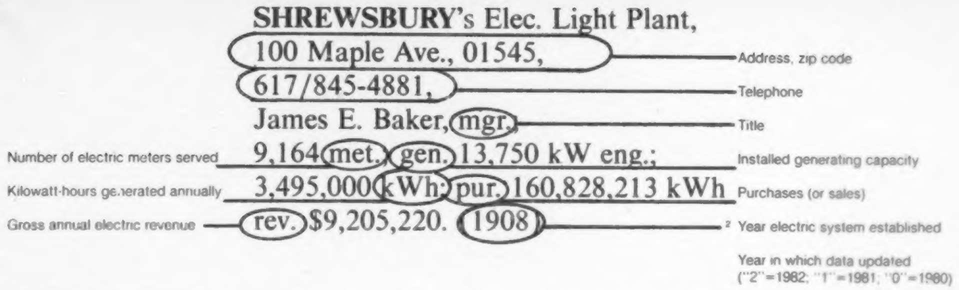
Local publicly owned electric utilities

State	
ALABAMA	36
ALASKA	11
ARIZONA	18
ARKANSAS	15
CALIFORNIA	35
COLORADO	30
CONNECTICUT	6
DELAWARE	9
FLORIDA	33
GEORGIA	52
HAWAII	0
IDAHO	13
ILLINOIS	41
INDIANA	72
IOWA	140
KANSAS	127
KENTUCKY	30
LOUISIANA	21
MAINE	6
MARYLAND	5
MASSACHUSETTS	40
MICHIGAN	41
MINNESOTA	125
MISSISSIPPI	23
MISSOURI	82
MONTANA	1
NEBRASKA	396
NEVADA	8
NEW HAMPSHIRE	5
NEW JERSEY	9
NEW MEXICO	8
NEW YORK	50
NORTH CAROLINA	72
NORTH DAKOTA	11
OHIO	83
OKLAHOMA	69
OREGON	16
PENNSYLVANIA	34
RHODE ISLAND	1
SOUTH CAROLINA	22
SOUTH DAKOTA	35
TENNESSEE	63
TEXAS	75
UTAH	36
VERMONT	15
VIRGINIA	17
WASHINGTON	42
WEST VIRGINIA	2
WISCONSIN	84
WYOMING	13
AMERICAN SAMOA	1
CANAL ZONE	1
GUAM	1
PUERTO RICO	1
VIRGIN ISLANDS	1
TOTAL	2,183


Address, zip code
Telephone
Title
Number of electric meters served
Installed generating capacity
Kilowatt-hours generated annually
Purchases (or sales)
Gross annual electric revenue
2 Year electric system established
Year in which data updated
("2"=1982; "1"=1981; "0"=1980)

SHREWSBURY's Elec. Light Plant,
100 Maple Ave., 01545,
617/845-4881,
James E. Baker, mgr.;
9,164 met.; gen. 13,750 kW eng.;
3,495,000 kWh; pur. 160,828,213 kWh
rev. $9,205,220. (1908) 2

ALABAMA

(Systems designated "TVA" are distributors of Tennessee Valley Authority power and purchase all of their power from TVA.)

ALBERTVILLE Mun Utils. Board, 210 West Main St., Box 130, 35950, 205/878-3761, James W. Johnson, gen. mgr.; 6,646 met; sales 308,440,162 kWh; rev. $11,177,123. (TVA) (1938) 2

ALEXANDER CITY Elec. Dept., Russell Road, Box 552, 35010, 205/329-8427, John S. Heard, supt; 4,962 met; no gen.; pur. 84.4 million kWh; rev. $3,727,000 (1918) 2

ANDALUSIA Elec. Dept. City Hall, 36420, 205/222-1332, 4,383 met.: no gen.; pur. 80,034,400 kWh; rev. $4,584,000. (1944) 2

ATHENS Elec. Dept., Box 268, 35611, 205/232-3140, Charles W. Robinson, mgr.; 19,993 met.: pur. 428.3 million kWh; rev. $15,995,430. (TVA) (1934) 2

BESSEMER Utils., 1600 First Ave., N., Box 846, 35021, 205/424-2301. W. G. Pettey Jr., util. mgr.; 12,934 met.; sales 255,352,561 kWh; rev. $11,082,918. (TVA) (1939) 2

BRUNDIDGE Elec. Dept., Box 338, 36010, 205/735-2321, Jack V. Taylor, mgr.; 1,200 met.; no gen.; pur. 22 million kWh; rev. $1,200,000 (1950) 1

COURTLAND Elec. Dept., Box 160, 35618, 205/637-2707, Roy Coffee, acting supt.; 810 met., pur. 13.3 million kWh; rev. $365,473. (TVA) (1938)

CULLMAN Power Bd., Drawer 927, 35055, 205/734-5536, Jimmy Garrett, mgr.; 6,700 met.; pur. 230.8 million kWh; rev. $7,155,281 (TVA) (1920) 2

DECATUR UTILITIES Elec. Dept., Box 2232, 35602, 205/350-6180, Frank L. Chenault Jr., mgr.; 18,389 met.; pur. 1,029,433,813 kWh; rev. $35,607,135. (TVA) (1938) 2

DOTHAN, City of, Elec. Dept. 126 N. St. Andrews St., 36303, 205/793-0166 ext. 166, Wylie H. Smith, supt.; 21,182 met.; no gen.; pur. 675,978,999 kWh; rev. $28,091,408. (1913) 2

ELBA Water & Elec. Dept. 300 Buford St., 36323, 205/897-2261, Cleo Hawkins, supt., 1,600 met.; pur. 36,000,000 kWh; rev. $185,000. 2

EVERGREEN Mun. Light Dept., 36401, J.W. Weaver, supt.; 32 million kWh. 2

FAIRHOPE Elec. Dept., 387 Fairhope Ave., Drawer 429, 36352, 205/928-2136, James P. Nix, mayor; 3,300 met.; no gen.; pur. 62 million kWh; rev. $2,155,667. 2

FLORENCE, City of, Elec. Dept., Box 877, 110 W. College St., 35631, 205/764-7271, J. H. McClanahan, mgr.; 33,981 met.; sales 770,467,313 kWh; rev. $32,530,386. (TVA) (1936) 2

FOLEY, City of, Utils. Bd., 413 E. Laurel Ave., Box 550, 36536, 205/943-5001, H. Sewell St. John Jr., gen. mgr.; 13,967 met.; no gen.; sales 244,358,805 kWh; rev. $12,725,411. (1941) 2

FORT PAYNE Improvement Authority, Box 150, 35967, 205/845-0671, George L. Black, mgr.; 4,762 met.; pur. 142.1 million kWh; rev. $3,942,995. (TVA) (1940)

GUNTERSVILLE Elec. Bd., 325 Gunter Ave., 35976, 205/582-5691, C. H. Gordon, mgr.; 4,417 met; pur. 136.6 million kWh; rev. $4,536,627. (TVA) (1938) 1

HARTFORD Water & Light Dept., 203 W. Main St., 36344, 205/588-2245; H. R. Lee, supt.; 1,100 met.; no gen.; pur. 22 million kWh.

HARTSELLE Elec. Bd., Box 847, 35640, 205/773-2588, Max King, mgr.; 3,934 met.; sales 95,409,572 kWh; rev. $4,241,585. (TVA) (1938) 2

HUNTSVILLE Utils., Box 2048, 35804, 205/533-0300, E. E. Cobb, gen. mgr.; 76,791 met.; sales 2,345,944,275 kWh; rev. $92,249,231. (TVA) (1940) 2

LAFAYETTE Mun. Light Plant, Box 87, 36862, 205/864-9812, Clyde Eugene Lamb, elec. dept. supt.; 1,284 met.; no gen.; pur. 15.9 million kWh; rev. $829,649. (1911) 2

LANETT, City of, Box 290, 36863, 205/644-2141, Edward Wright, city clerk; 3,226 met.; no gen.; pur. 43,056,000 kWh. $1,820,177. 2

LUVERNE Electric Board, Box 249, 36039, 205/335-3741, R. P. Coggins Jr., supt.; 1,410 met.; no gen.; pur. 31,853,280 kWh; rev. $1,536,089. 2

MUSCLE SHOALS Elec. Bd., 1000 Avalon Ave., 35660, 205/383-6681, T. D. Lasater, mgr.; 4,115 met.; sales 144,142,335 kWh; rev. $5,904,195. (TVA) (1933) 2

OPELIKA Light & Power Dept., 1010 Ave. C, 36801, 205/745-4681, B. J. Douglas supt.; 9,500 met.; no gen.; pur. 220 million kWh; rev. $8,250,000. (1910) 0

OPP, City of, Utils. Bd., Box 311, 36467, 205/493-4571, Charles McGowan, mgr.; 3,236 met.; no gen.; pur. 2,276,500 kWh; rev. $2,867,755. (1943) 2

PIEDMONT, City of, Elec. Sys., Box 112, 36272, Kenneth Jackson, supt.; 2,200 met.; no gen.; pur. 38 million kWh; rev. $1.3 million. 2

ROBERTSDALE Mun. Utils., Drawer CC, 36567, 205/947-2144, Paul N. Edhegard, supt. of utils.; 1,219 met.; no gen.; pur. 26.7 million kWh; rev. $1,203,229. (1949) 2

RUSSELLVILLE Elec. Bd., Box 1148, 35653, 205/332-3850, Robert L. Stephenson, mgr.; 3,936 met.; no gen.; pur 108.3 million kWh; rev. $4,241,812. (TVA) (1938) 2

SCOTTSBORO Power Bd., Box 399, 35768, 205/574-2680, L. E. Price, mgr.; 6,801 met.; pur. 297,014,487 kWh; rev. $10,455,000. (TVA) (1939) 2

SHEFFIELD Power, Water & Gas Dept. Box 580, 35660, 205/383-5221, R. A. Azbell, gen. mgr.; 15,274 met.; sales 423,709,217 kWh; rev. $17,443,852. (TVA) (1936) 2

SYLACAUGA, City of, Utils. Bd., Box 207, 35150, 205/249-0372, William T. Scott, mgr.; 5,285 met.; no gen.; sales 101,690,000 kWh, rev. $5,181,493. (1955) 2

TARRANT CITY Elec. Dept., 1000 Ford Ave., Box 6536, 35217, 205/841-1721, Harold Hunt, supt.; 2,460 met.; pur. 70.8 million kWh; rev. $2,421,208. (TVA) (1939) 1

TROY, City of, Elec. Dept., Box 549, 36081, 205/566-2130, G. H. Reeves, supt., 4,700 met.; no gen.; pur. 139 million kWh; rev. $5,200,000. (1895) 2

TUSCUMBIA, City of, Elec. Dept., Box 269, 35674-0269, 205/383-0321, Charles P. Ricks, mgr.; 3,652 met.; sales 81,290,362 kWh; rev. $3,524,603. (TVA) (1937) 2

TUSKEGEE, City of, 210 N. Main St., 36083, 205/727-6227, William Turner Jr., supt.; 6,763 met.; no gen.; pur. 1,444,239 kWh; rev. $4,162,190. (1954) 2

ALASKA

ALASKA POWER AUTHORITY, 334 West 5th Ave., Anchorage, 99501, 907/276-0001, Eric P. Yould, exec. dir. (**APA is a new state corporation which is doing hydroelectric feasibility and reconnaissance studies but does not yet generate electricity.**) 2

ANCHORAGE Mun. Light & Power, 1200 E. First Ave., 99501, 907/279-7671, Thomas R. Stahr, gen. mgr.; 21,534 met.; gen. 215,900 kW, 139,900 kW comb. turbine; 74,000 kW comb. cycle; 2,000 kW eng.; 485,301 kWh; pur. 81,600,000 kWh; rev. $24,082,114. (1932) 2

FAIRBANKS Mun. Utils., 645 Fifth Ave., Box 2215, 99707, 907/456-1000, William R. Perry, gen. mgr.; 6,055 met.; gen. 65,100 kW, 28,500 kW coal-fired steam, 28,350 kW gas turbine, 8,250 oil-fired eng., 168,036,000 kWh; pur. 4,999,700 kWh; rev. $10,857,102. (1949) 2

KETCHIKAN Pub. Utils., 334 Front St., Box 7300, 99901, 907/225-3111, ext. 330, Robert E. Arnold, util. mgr.; 5,716 met.; gen. 28,650 kW, 17,450 kW oil 11,200 kW hydro, 94,933,400 kWh; pur. none. (1935) 2

METLAKATLA Power and Light, Box 346, 99926, 907/886-6661, Warren B. Dorland, gen. mgr.; 455 met.; gen. 6,000 kW, 3,000 kW hydro, 3,000 kW eng., 16,000,000 kWh; rev. $1,200,000. (1927) 2

NOME Joint Utils., Box 70, 99762, 907/443-5288, Dean Wolfe, mgr.; 1,157 met.; gen. 5,400 kW eng., 13,687 million kWh; pur. none; rev. $2,912,172. (1954) 1

PETERSBURG Mun. Light and Power, Box 329, 99833, 907/772-4203, William K. Mearig, supt.; 1,317 met.; gen. 7,150 kW, 2,000 kW hydro, 5,350 kW eng., 17,884 million kWh; pur. none; rev. $1,846,450. (1924) 1

SEWARD Elec. Municipal Bldg., Box 167, 99664, 907/224-3331, Tom Small, engr.; 1,600 met.; gen. 5,500 kW oil-fired eng.; 1,281,000 kWh; pur. 27.3 million kWh; rev. $1,710,248. (1955) 2

SITKA Mun. Utils., Lincoln St., Box 79, 99835, 907/747-6633, James D. Dwyer, supt.; 3,253 met.; gen. 29,000 kW, 7,000 kW eng., 22,000 kW hydro, 54 million kWh; pur. 610,600 kWh; rev. $4,322,800. (1941) 2

UNALASKA Elec. Dept., Box 89, 99685, Paul Sanders, util. dir.; 200 met.; gen. 900 kW diesel, 1.7 million kWh; rev. $250,000. 1

WRANGELL Light & Power Dept., Box 531, 99929, 907/874-2381, Frank Fields, supt.; 1,100 met.; gen. 7,750 kW oil-fired eng., 11 million kWh; pur. 577,000 kWh; rev. $1,795,357. 2

ARIZONA

ARIZONA POWER AUTHORITY, 1810 W. Adams St., Box 6694, Phoenix, 85005, 602/255-4263, Lester S. Ormsby, admn.; 17 met. (wholesale); no gen.; sales 738,129,292 kWh; rev. $6,811,865. (1944) 2

CORTARO WATER USERS ASSN., 13864 N. Sandario Rd., Marana, 85238, 602/682-3233; Pat Garrett, gen. mgr.; 450 met.; no gen.; $800,000. 1

ELECTRICAL DISTRICT NO. 1, Pinal County, 711 E. Cottonwood Lane, Suite C, Casa Grande, 85222, 602/836-8201, M. S. Ray, mgr.; 67 met.; sales 48,220 kWh; rev. $1,259,785. 2

ELECTRICAL DISTRICT NO. 2, Pinal County, Box 548, Coolidge, 85228, 602/723-7741, William J. Metheny, gen. mgr.; 2,250 met.; no gen. (1927) 1

ELECTRICAL DISTRICT NO. 3, Pinal County, 711 E. Cottonwood Lane, Suite C, Casa Grande, 85222, 602/836-8201, Milton S. Ray, mgr.; 488 met; no gen.; sales 327,059 kWh; rev. $7,536,607. (1961) 2

ELECTRICAL DISTRICT NO. 4, 231 S. Sunshine Blvd., Eloy, 84231, 602/466-7336, James Sweeney, mgr.; 400 met.; no gen.; pur. 128.8 million kWh; rev. $1,420,319. (1936)

ELECTRICAL DISTRICT NO. 5, Pinal County, Box 8, Red Rock, 85245, William D. Woehlecke, gen. mgr.; 265 met.; no gen.; pur. 86.4 million kWh; rev. $550,820.

ELECTRICAL DISTRICT NO. 6, Pinal County, Suite 720, 2845 E. Camelback Rd., Phoenix, 85016, Raymond D. Schnepf, chmn., 192 met.; no gen.; pur. 114,630,903 kWh; rev. $5,031,304. (1965) 2

HOLBROOK, 86025. (Town owns distribution system; leased to Arizona Public Service Co.)

MARICOPA WATER DISTRICT, Box 730, Peoria, 85345, H. S. Raymond, gen. mgr.; 83 met.; no gen.; pur. 39 million kWh; rev. $1,064,622. 2

MESA, City of, 730 N. Mesa Dr., Box 1466, 85201, 602/834-2265; Richard R. Williams, elec. util. mgr., 10,200 met.; no gen.; pur. 212 million kWh; rev. $8,764,800. (1917) 1

NAVAJO TRIBAL UTILITY AUTHORITY, Box 170, Fort Defiance, 86504, 602/729-5721, Malcolm P. Dalton, gen. mgr.; 18,431 met.; no gen.; sales 438,013,671 kWh; rev. $17,292,916. (1965) 2

PAPAGO TRIBAL UTILITY AUTHORITY, Box 816, Sells, 85634, 602/383-2236, Jerrel D. Huey, gen. mgr.; 1,800 met.; no gen.; pur. 113, 637,000 kWh; rev. $3,691,000. (1970) 2

ROOSEVELT WATER CONSERVATION DISTRICT (Irrigation), Box 168, Higley, 85236, 602/963-3414, Grant R. Ward, gen. mgr.; no gen.; pur. 92 million kWh; rev. $3,400,000. (1924) 2

SAFFORD, City of, 717 Main St., Box 272, 85546, 602/428-2762, Max L. Norris, elec. serv. dir; 2,960 met.; sales 36,282,354 kWh; rev. $2,688,918. (1937) 2

SALT RIVER PROJECT, Box 1980, Phoenix, 85001, 602/273-5900, A. J. Pfister, gen. mgr.; 330,251 met.; gen. 3,534,260 kW, 1,905,148 kW coal, 528,472 kW oil and gas, 449,800 kW combus. turbine, 414,000 kW combined cycle, 236,841 hydro, 10,864,364 kWh; sales 12,028,474 kWh; rev. $532,943,444. (1937) 2

THATCHER Mun. Utils., Box 670, 85552, 602/428-2290, Herbert Winsor, mgr.; 700 met.; no gen.; pur. 292,087 kWh; rev. $451,045. (1946) 2

WELLTON-MOHAWK IRRIGATION & DRAINAGE DISTRICT, Route 1, Box 19, Wellton, 85356, 602/785-3351, C. L. Gould, mgr.-secy.; 2,783 met.; no gen.; sales 45,619,696 kWh; rev. $2,281,238. (1952) 2

WICKENBURG, Town of, Box 1269, 120 E. Apache, 85358, 602/684-5451, Coney Orosco, dir. of pub. works; 1,075 met.; no gen.; sales 13,251,498 kWh; rev. $941,423. (1947) 2

WILLIAMS, 86046. (Town owns distribution system; leased to Arizona Public Service Co.)

ARKANSAS

AUGUSTA City Light, Water & Gas Plant, 100 S. Fifth St., 72006, Ronnie Stracener, mgr.; 1,201 met.; gen. 2,838 kW eng., 2.8 million kWh; pur. 16 million kWh; rev. $407,527. 0

BENTON, City of, 222 W. South St., 72015, 501/778-1131, Charles Nickerson, city mgr., 7,020 met.; gen. 560 kW oil (Eng.); 8,660 kW dual-fuel; 1,283, 700 kWh; sales 107,703,300 kWh; rev. $5,228,245. 2

BENTONVILLE Light & Water System, City Hall, 115 W. Central, 72712, 501/273-9061, Wayne Holloway, elec. supt.; 3,800 met.; no gen.; pur. 75.8 million kWh; rev. $1,927,368. (1902) 0

CLARKSVILLE Light & Water Co., Box 99, 72830, 501/754-3148, Ottis R. Cude, mgr.; 2,849 met.; no gen.; pur. 69,137,323 kWh; rev. $2,182,233. (1932)

CONWAY Corp., 1319 Prairie St., 72032, 501/329-5641, James H. Brewer, gen. mgr.; 8,136 met.; gen. 43,640 kW, 32,620 kW coal, 11,020 kW dual-fuel, 203,233,649 kWh; sales 193,992,303 kWh; rev. $8,847,965. (1901) 2

HOPE Water & Light Plant, Box 667, 71801, 501/777-6701, John D. Swift, utils. mgr.; 5,600 met.; no gen.; pur. 123,793,687 kWh; rev. $5,657,840. 2

JONESBORO City Water & Light, 400 E. Monroe, Box 1289, 72401, 501/935-5581, Marion R. Ulmer, mgr.; 14,813 met.; gen. 82,000 coal, 219,910,000 kWh; sales 403,574,742 kWh; rev. $15,203,309. (1906) 2

NORTH LITTLE ROCK City of Elec. Dept., 800 Main St., Box 159, 72115, 501/372-0100, Robert Hogan, gen. mgr.; 30,406 met; no gen.; sales 521,637,534 kWh; rev. $29,092,247. (1903) 2

OSCEOLA Mun. Light & Power, 316 W. Hale Ave., 72370, 501/563-5245, Jack L. Wilson, util. mgr.; 3,774 met.; no gen.; sales 97,966,412 kWh, rev. $4,780,760. (1928) 2

PARAGOULD Light Plant Commission, 303 W. Court St., 72450, 501/236-8571, John H. McDaniel, mgr.; 7,955 met.; gen. 4,200 kW dual-fuel; pur. 209,590,000 kWh; rev. $4,876,138. (1938) 2

PARIS Mun. Light & Water Plant, Box 271, 72855, 501/963-2450, William McKelvy, mgr.; 1,650 met.; no gen.; pur. 28 million kWh; rev. $952,000. 0

PIGGOTT Mun. Light, Water & Sewer, 194 W. Court St., 72454, 501/598-3243, Teddy F. Bellers, ofc. mgr.; 2,032 met.; gen. 2,277 kW oil-fired, 5,221 kW dual-fuel, 377,000 kWh; pur. 40,118,000 kWh. (1923) 2

PRESCOTT Water & Light Plant, 118 W. Elm St., 71857, 501/887-2210, Larry Stockton, gen. mgr.; 1,850 met.; no gen.; pur. 1,787,533 kWh; rev. $2,433,893. (1921) 2

SILOAM SPRINGS, City of, 410 N. Broadway, 72761, 501/524-5136, James R. Kirchoff, util. supt.; 3,700 met.; no gen.; pur. 109 million kWh; rev. $3.93 million. (1901) 1

WEST MEMPHIS Util. Comm., 604 E. Cooper, Box 38, 72301, P. G. Para, mgr.; 10,350 met.; no gen.; pur. 237 million kWh. 0

CALIFORNIA

ALAMEDA Bureau of Elec., 2000 Grand St., 415/522-7411, Jack Shepard, gen. mgr. and chief engr.; 27,066 met.; no gen.; sales 349,598,912 kWh; rev. $17,741,880. (1887) 2

ANAHEIM, City of, Pub. Utils. Dept., 200 S. Anaheim Blvd., Box 3222, 92805, 714/999-5173, Gordon W. Hoyt, util. dir.; 80,038 met.; no gen.; pur. 1,834.2 million kWh; rev. $108,000,000. (1895) 1

AZUSA Light, Power Dept., 777 N. Alameda Ave., Box 667, 91702, 213/334-5125, Hugh Gerharz, supt. light & power; 11,622 met.; no. gen.;

pur. 153,737,306 kWh; rev. $9,347,652. (1898) [2]

BANNING, City of, 161 W. Ramsey St., Box 998, 92220, 714/849-4511, Gene Cranford, elec. supt.; 7,000 met.; no gen.; pur. 67,000,000 kWh; rev. $5,000,000. (1923) [2]

BIGGS, City of, Box 307, 95917, 916/868-5493, W.T. West, dir. pub. wks.; 563 met.; no gen.; sales 8,693,000 kWh; rev. $245,585. (1903) [2]

BURBANK, City of, Pub. Service Dept., 164 W. Magnolia Blvd., Box 631, 91503, 213/847-9640, Ronald O. Snyder, gen. mgr.; 41,911 met.; gen. 152,000 kW steam turbine (gas), 79,000 comb. turbine (gas), 496,344,000 kWh; sales 848,000,000 kWh; rev. $51,654,000. (1913) [2]

CALAVERAS COUNTY Water District, Box 846, San Andreas, 95246, 209/754-3543, Steve Felte, gen. mgr. (**The district plans to generate hydropower for sale to public power systems.**) (1947) [2]

CALIFORNIA DEPT. OF WATER RESOURCES, 1416 Ninth St., Sacramento 95814, 916/445-9890, Ronald B. Robie, dir.; no. retail customers; gen. 1,101,050 kW hydro, 3,096,972,327 kWh; pur. 4,618,303,162 kWh; rev. $28,697,139. (1958) [2]

COLTON, City of, 650 N. La Cadena Dr., 92324, 714/825-3110, ext. 37, Gale A. Drews, elec. util. dir.; 8,479 met.; no gen.; sales 113,601,908 kWh; rev. $7,381,689. (1897) [2]

EAST BAY Mun. Util. Dist., Box 24055, Oakland, 94623, 415/835-3000, J. B. Gilbert, gen. mgr.; 2 met. (output sold to Pacific Gas & Electric); gen. 18,750 hydro; 119,220,653 kWh; rev. $690,647. (1930) [1]

GLENDALE Pub. Service Dept., 119 N. Glendale Ave., 91206, 213/956-3977, W. H. Fell, gen. mgr. and ch. engr.; 67,080 met.; gen. 268,000 kW, 117,000 kW gas, 53,000 kW gas turbine, 98,000 kW eng., (comb. cycle), 390,703,000 kWh; sales 760,032,307 kWh; rev. $54,116,230. (1909) [2]

GRIDLEY, City of, 685 Kentucky St., 95948, 916/846-3631, David McEntyre, pub. serv. coord.; 1,659 met.; no gen.; pur. 20.5 million kWh; rev. $621,318. (1910) [1]

HEALDSBURG, City of, Mun. Elec., 755 Westside Road, Box 578, 95448, 707/433-8801, Paul Cavote, elec. util. dir.; 3,723 met.; no gen.; sales 59,265,000 kWh; rev. $3,003,922 (1895) [2]

HETCH HETCHY WATER & POWER PROJECT, 693 Vermont St., San Francisco, 94107, 415/558-3038, Dean Coffey, gen. mgr.; no retail residential customers; gen. 292,500 kW hydro, 1,668, 277,050 (FY 1980-81) kWh; pur. 507,144,871 kWh; rev. $49,800,810 (1925) [2]

IMPERIAL IRRIGATION DISTRICT, 333 E. Main St., Imperial, 92251, 714/355-1112, Donald A. Twogood, gen. mgr.; 56,400 met.; gen. 189,000 kW oil & gas, 760.5 million kWh; pur. 810,798,354 kWh; rev. $59,940,769. [2]

LODI, City of, 221 W. Pine St., Box 320, 95240, 209/334-5634, David K. Curry, util. dir.; 16,222 met.; no gen.; pur. 232,569,447 kWh; rev. $15,572,743. (1910) [2]

LOMPOC, City of, 100 Civic Center Plaza, 93438, 805/736-1261, H. Paul Jones, elec. supt., 10,531 met.; no gen.; sales 75,462,571; rev. $2,987,907. [2]

LOS ANGELES Dept. of Water and Power, 111 N. Hope St., Box 111, 90051, 213/481-4211, ext. 5651, James L. Mulloy (Paul H. Lane after 4-1-83), gen. mgr. and chief engr.; 1,258,237 met.; gen. 6,244,000 kW, 4,293,000 kW oil, 1,951,000 kW hydro, 20.1 million kWh; pur. 2,099.6 million kWh; rev. $1,139,272,315. (1916) [1]

MERCED IRRIGATION DISTRICT, Box 2288, Merced, 95344, 209/722-5761, Ray Anderson, sec. mgr.; wholesale only, gen. 92,700 kW hydro, 542.6 million kWh; pur. none; rev. $1,915,000. (1919) [1]

MODESTO IRRIGATION DISTRICT, Box 4060, Modesto, 95352, 209/578-1212, H.L. (Les) Brooks, gen. mgr., 66,034 met.; gen. 150,020 kW, 99,900 kW oil (comb. turbine), 52,120 kW hydro, 157,152,418 kWh; pur. 1,184,888,194 kWh; rev. $44,310,100. (1923) [2]

OROVILLE WYANDOTTE IRRIGATION DISTRICT, Box 117, Forbestown, 95941, 916/534-1221, Steven C. Onken, power supt.; gen. 101,000 kW hydro, 500 million kWh. (Output sold to Pacific Gas & Electric Co.) (1963) [1]

PALO ALTO, City of, Elec. Util., 250 Hamilton Ave., 94301, 415/329-2386, Edward K. Aghjayan, dir. util.; 25,000 met.; no gen.; sales 810,378,898 kWh; rev. $18,494,692. (1900) [2]

PASADENA, City of, Water & Power Dept., 100 N. Garfield Ave., 91109, 213/577-4409, Karl A. Johnson, gen. mgr.; 52,281 met.; gen. 516,000,000 kWh; pur. 413.2 million kWh; rev. $45,817,062. (1906) [2]

PLACER COUNTY WATER AGENCY, Box 667, Foresthill, 95631, 916/885-6917, Elmer Pretzer, power systems mgr.; gen. 234,000 kW (hydro); 558,464,271 kWh; rev. $5,628.000; (Output sold to Pacific Gas and Electric.) (1966) [2]

REDDING, City of, 760 Parkview Ave., 96001, 916/222-2028, Sam Lindley, dir. elec. dept.; 20,984 met.; no gen.; pur. 455,847,501 kWh; rev. $10,133,491. [2]

RIVERSIDE, City of, Pub. Util. Dept., 3900 Main St., 92522, 714/787-7473, Everett C. Ross, pub. util. dir.; 68,656 met.; no gen.; pur. 1,094,927,000 kWh; rev. $49,176,000. (1895) [2]

ROSEVILLE, City of, 316 Vernon St., 95678, 916/783-9151, Quentin Mizer, elec. util. dir.; 11,509 met.; no gen.; sales 166, 567,000 kWh; rev. $4,559,805. (1906) [2]

SACRAMENTO Mun. Util. Dist., Box 15830, 95813, 916/452-3211, John J. Mattimoe, gen. mgr.; 343,159 met.; gen. 1,562,000 kW, 913,000 kW nuclear, 649,000 kW hydro, 3,892,003 kWh; sales 5,694,465,485 kWh; rev. $154,270,009. (1947) [2]

SAN FRANCISCO Pub. Utils. Comm., Rm. 287, City Hall, 94102, 415/558-4986, Richard Sklar, gen. mgr.; 861 met. (municipal and wholesale only); rev. $11,314,000. [1]

SANTA CLARA, City of, Mun. Elec. Dept., 1500 Warburton Ave., 95050, 408/984-3161, Don R. Von Raesfeld, city mgr.; 39,227 met.; no gen.; sales 1,592,719,000 kWh; rev. $54,729,537. (1896) [2]

SHASTA DAM AREA PUD, Box 777, Central Valley, 96019, 916/275-8827, Ron Criss, actg. gen. mgr.; 3,433 met.; no gen.; sales 53,406,029 kWh; rev. $1,082,323. (1947) [2]

TRUCKEE-DONNER PUD, Box 309, Truckee, 95734, 916/587-3896, D. Eugene Holt, gen. mgr.; 5,234 met.; no gen.; pur. 69.9 million kWh; rev. $3,620,585. (1928) [2]

TURLOCK IRRIGATION DISTRICT, 333 E. Canal Drive, Turlock, 95381, 209/632-3861, Ernest Geddes, gen. mgr.; 43,925 met.; gen. 121,859 kW hydro, 354,101,094 kWh; sales 801,437,725 kWh; rev. $24,287,690. (1887) [2]

UKIAH, City of, 203 S. School St., 95482, 707/462-2971, Alfred S. Kruth, dir. pub. wks.; 5,970 met.; no gen.; sales 79,093,185 kWh; rev. $4,769,118. (1899) [2]

VERNON, Light & Power Dept., 4305 Santa Fe Ave., 90058 213/583-8811, Bruce V. Malkenhorst, exec. dir.; 2,083 met.; no gen.; pur. 1,222,631,000 kWh; rev. $61,596,196. (1933) [2]

YUBA COUNTY WATER AGENCY, Box 176, Dobbins, 95935, 916/692-1633, D. D. Dutton, mgr.; gen. 365,000 kW hydro, 2,323 million kWh. (Present output sold to Pacific Gas & Electric Co.) (1970) [1]

COLORADO

ASPEN, City of, 130 S. Galena, 81611, 303/925-2020, ext. 241, Thomas J. Maddalone, elec. dept. head; 2,100 met.; no gen.; pur. 39,235,200 kWh. (1956) [2]

BURLINGTON, City of, 480 15th St., 80807, 303/346-8585, Lester R. McLain, city mgr.; 1,830 met.; gen. 4,600 kW eng.; 7,550 kW dual-fuel; sales 163,377 kWh; rev. $1,204,348. (1920) [2]

CENTER Mun. Utils., Box 400, 81125, 303/754-3497, Darrell T. Davis, supt.; 825 met.; gen. 1,150 kW (oil) eng. 504 kW (dual-fuel) eng.; sales 10,654,451 kWh; rev. $271,846. (1941) [2]

COLORADO SPRINGS, City of, Dept. of Pub. Utils., 30 N. Nevada Ave., 80947, 303/636-5301, James D. Phillips, dir.; 104,292 met.; gen. 515,000 kW, 509,000 kW coal, 6,000 kW hydro, 2,903,000,000 kWh; pur. 198,000,000 kWh; rev. $94,763,109. (1924) [2]

DELTA, Mun. Light & Power, 1133 Main St., Box 19, 81416, 303/874-7566, Annette Brand, city mgr.; 1,998 met.; gen. 4,989 dual-fuel eng., 5,346,800 kWh; pur. 30,258,441 kWh; rev. $1,559,809. [2]

ESTES PARK, Town of, Box 1200, 80517, 303/586-5331, Robert L. Dekker, dir.; 5,722 met.; gen. 880 kW hydro, sales 53,220,029 kWh; rev. $2,673,141. (1945) [2]

FLEMING, Box 466, 80728, Lester Harms, mayor, 146 met.; no gen.; pur. 1,990,400 kWh. [2]

FORT COLLINS Light & Power Utility, Box 580, 80521, 303/221-0501, Bill D. Carnahan, gen. mgr.; 27,158 met.; no gen.; sales 458,282,740 kWh; rev. $19,444,859. (1935) [2]

FORT MORGAN, City of, 710 E. Railroad Ave., Box 100, 80701, 303/867-3001, Glen W. Calvert, city supt.; 5,400 met.; no gen.; pur. 90.9 million kWh; rev. $1,751,195 (1903)°

FOUNTAIN Elec. Util., 116 S. Main St., 80817, 303/382-5604, Frank Bustamento, supt.; 7,200 met.; no gen.; pur. 72,886,000 kWh; rev. $2,800,000. [2]

FREDERICK, Town of, Box 435 80530, 303/833-2388, Edward J

Tagliente, mayor; 300 met.; no gen.; pur. 3,992,300 kWh; rev. $137,356. [2]

GLENWOOD SPRINGS Elec. System, 806 Cooper Ave., 81601, 303/945-6672, Jim Gambrel, supt.; 4,950 met.; no gen.; pur. 54,725,600 kWh; rev. $2,803,762. (1942) [2]

GRANADA, Town of, 109 E. Goff St., Box 258, 81041, Thelma Schibblehut, town clerk; 200 met.; 303/734-5411. [2]

GUNNISON, City of, Box 239, 81230, 303/641-2443, Dale Howard, city mgr.; 2,698 met.; no gen.; pur. 41,853,998 kWh; rev. $1,283,190. (1880s) [2]

HAXTUN Mun. Light & Power Dept., 145 S. Colorado Ave., Box 205, 80731, 303/774-6104, R. D. Orcutt, supt.; 585 met.; no gen.; pur. 100,193 kWh; rev. $216,000. (1918) [2]

HOLLY, Town of, Box 458, 81047, 303/537-6622, Dorothy Cook, town clerk; 676 met.; no gen.; pur. 6,323,520 kWh; rev. $292,041. (1949) [2]

HOLYOKE Light & Power, 207 W. Denver St., 80734, 303/854-2266, Les Lutze, city supt.; 1,065 met.; no gen.; pur. 15,200,242 kWh; rev. $438,000. [2]

JULESBURG Mun. Power & Light, 222 E. First St., Box 508, 80737, 303/474-3344, Melvin Mikleson, town mgr.; 900 met.; gen. 3,305 kW eng., 7.7 million kWh; pur. none; rev. $200,000.

LA JUNTA Mun. Util., Box 630, 81050, 303/384-2546, Carme A. Sarlo, city mgr.; 3,696 met.; gen. 19,350 dual-fuel eng., 262,700 kWh; pur. 56,978,610 kWh; rev. $3,437,734. (1939) [2]

LAMAR, Utils. Bd. of, 100 N. Second St., 81052, 303/336-7456, Kevin G. Wailes, supt.; 5,112 met.; gen. 35,000 kW, 33,000 kW gas, (steam turbine), 2,000 kW oil-fired, comb. cycle, 103,093,295 kWh; sales 103,093,295 kWh; rev. $4,618,354. (1919) [2]

LAS ANIMAS Mun. Light & Power, Box 271, 81054, 303/456-1621, Dwain Parrack, supt.; 1,953 met.; gen. 5,000 kW dual-fuel, 620 kW oil (eng.); 82,200 kWh; pur. 21,742,000 kWh; rev. $946,443. (1941) [2]

LONGMONT, City of, Elec. Util., 1100 S. Sherman St., 80501, 303/776-6050, David C. Plumb, dir.; 28,491 met.; gen. 81,747 kW coal; 600 kW hydro; 256,350,638 kWh; sales 236,839,215; rev. $10,308,968. (1911). [2]

LOVELAND, City of, 446 N. Garfield, 80537, 303/667-6130, Dieter Wirtzfeld, supt.; 13,896 met.; no gen.; sales 195,042,000 kWh; rev. $8,677,189. (1925) [2]

LYONS, Town of, 432 5th Ave., 80540, 303/823-6622, Ralph Leum, pub. wks. dir.; 500 met.; no gen.; pur. 170,449 kWh; rev. $292,215. [2]

OAK CREEK, Town of, Box 128, 80467, 303/736-2422, John Yurich, town mgr.; 507 met.; no gen.; rev. $155,200. [1]

SPRINGFIELD Mun. Util., Box 4, 81073, 303/523-4528, Tommy Lithe, supt.; 950 met.; gen. 2,495 kW dual-fuel eng.; pur. 8,000,000 kWh. (1949) [2]

TRINIDAD Mun. Power & Light Dept., Box 880, 81082, 303/846-2775; David Brunelli, supt.; 4,263 met.; gen. 11,250 kW, 3,750 kW coal, 3750 kW gas, 3,750 kW dual-fuel, 16,349,299 kWh; sales 34,558,000 kWh; rev. $2,382,268. (1949) [2]

WALSENBURG Utils., 525 S. Albert, 81089, 303/738-1140, Richard Abila, supt.; 1,315 met.; no gen.; sales 14,806,000. [2]

WRAY Mun. Light & Power, Box 35, 80758, 303/332-4431, Robert Snedeker, city mgr.; 1,500 met.; no gen.; 1,590,000 kWh; rev. $580,000. (1910) [2]

YUMA Mun. Light & Power, 221 S. Main St., 80759, 303/741-2242, Paul Metcalf, city mgr.; 1,300 met.; gen. 800 kW eng.; pur. 9.4 million kWh; rev. $161,877.

CONNECTICUT

GROTON City of, Dept. of Util., 295 Meridian St., Box 820, 06340, 203/445-8571, William W. Clinton, dir. of utils.; 11,676 met.; no gen.; sales 500,012,247 kWh; rev. $28,279,213. (1904) [2]

JEWETT CITY Elec. Light Plant, 29 Park Square, 06351, 203/276-2955, 376-2877, Joseph M. Dudek, supt.; 1,799 met.; no gen.; pur. 13.2 million kWH; rev. $792,298. (1893) [1]

NORWALK THIRD TAXING DISTRICT, Elec. Dept., 2 Second St., E. Norwalk, 06855, 203/866-9271, William J. Lyons, Jr., mgr.; 3,127 met.; no gen.; sales 44,589,828 kWh; rev. $2,468,918. (1911) [2]

NORWICH Dept. of Pub. Util., 34 Shetucket St., 06360, 203/887-2555, Richard E. DesRoches, gen. mgr.; 16,255 met.; gen. 19,750 kW, 16,750 kW oil (comb. turbine), 3,000 kW hydro, 12,611,323 kWh; sales 226,448,000 kWh; rev. $16,378,000. (1904) [2]

SOUTH NORWALK Elec. Works, State St., Box 400, 06856, 203/866-3366, Larry Rossi, supt.; 5,013 met.; gen. 15,280 kW oil, eng., 2,064,077 kWh; pur. 58,308,423 kWh; rev. $4,565,092. (1892) [2]

WALLINGFORD Town of, Elec. Div., Dept. of Pub. Utils., 100 John St., Box 190, 06492, 203/265-1593, Raymond F. Smith, dir. of utils.; 16,602 met.; gen. 22,500 kW oil, (steam turbine), 635,000 kWh; sales 375,451,000 kWh; rev. $22,827,323. (1899) [2]

DELAWARE

CLAYTON Mun. Light & Power, 314 Main St., 19938, James H. Carson, Jr., council pres., 590 met.; pur. 4,570,000 kWh; rev. $217,272. [0]

DOVER City of, Elec. Dept., Box 475, 19901, 302/736-7070, Robert J. Bartolotta, city mgr., 13,465 met.; gen. 143,500 kW, 143,000 kW steam, 500 kW eng., 610.4 million kWh; pur. 56,118,000 kWh; rev. $41,758,000. (1902) [2]

LEWES Bd. of Pub. Works, Box 518, 19958, 302/645-6228, -6229, Ronald Donovan, gen. mgr.; 1,912 met.; pur. 38,676,000 kWh.; rev. $2,462,355. (1901) [2]

MIDDLETOWN Town of, Town Hall, Box 227, 19709, 302/378-2711, Arthur Pennewill, councilman; 500 met.; no gen.; pur. 16,300,000 kWh; rev. $1,600,000. [2]

MILFORD, City of, 201 S. Walnut St., 19963, 302/422-6616, Ralph A. Clark, city mgr.; 3,500 met.; no gen.; rev. $5,100,000. (1918) [0]

NEWARK, City of, 220 Elkton Rd., 19711, 302/366-7050, Peter Marshall, city mgr.; 7,543 met.; no gen.; sales 168,314,103 kWh; rev. $11,441,915. (1892) [2]

NEW CASTLE Bd. of Water & Light Comm., 216 Chestnut St., Box 208, 19720, 302/328-2325, Edward J. Murphy, secy.-mgr.; 1,935 met., no gen.; sales 14,695,966 kWh; rev. $1,555,204. (1921) [2]

SEAFORD City of Elec. Dept., 302 E. King St. Box 671, 19973, 302/629-9173, Dolores F. Jones, city mgr.; 2,531 met.; gen. 7,302 kW diesel; pur. 49,860,000 kWh; rev. $3,561,337. [2]

SMYRNA, Town of, 27 S. Market St., 19977, 302/653-9231, Harry M. Odren, town mgr.; 2,004 met.; no gen.; pur. 31,718,400 kWh; rev. $2,617,719. (1893) [2]

FLORIDA

ALACHUA, City of, Box 9, 32615, 904/462-1231, Richard Schlaf, city mgr.; 1,482 met.; no gen.; pur. 26,506,249 kWh; rev. $1,568,013. (1960) [2]

BARTOW, City of, 250 N. Central Ave., 33830, 813/533-0911, James R. O'Connor, city mgr.; 8,320 met.; no gen.; pur. 180,479,000 kWh; rev. $11,515,304. (1903) [2]

BLOUNTSTOWN Mun. Elec. Dept., 125 W. Central Ave., 32424, 904/674-5488, Ed Stacey, elec. dept. supvr.; 1,255 met.; no gen.; pur. 19 million kWh; rev. $1.5 million (1903) [2]

BUSHNELL Util. Dept., Box 115, 33513, 904/793-2591, Lelman Shaw, supt.; 672 met.; rev. $848,301. (1921) [2]

CHATTAHOOCHEE, City of, City Hall, Box 188, 32324, 904/663-4810, Clyde Hopkins, supt.; 1,200 met.; no gen.; pur. 18 million kWh; rev. $750,000. (1915) [0]

CLEWISTON, City of, Box 698, 33440, 813/983-9191, C. F. Blair, city mgr.; 3,285 met.; no gen.; sales 65,676,538 kWh; rev. $4,249,490. (1942) [2]

FORT MEADE, City of, Box 856, 33841, 813/285-8191, Robert Bullard, city mgr.; 2,335 met.; no gen.; pur. 31,886,000 kWh; rev. $2,084,856. (est. 1920's) [2]

FORT PIERCE Utils. Authority, 206 S. 6th St., Box 3191, 33450, 305/464-5600, Ewell E. Menge, dir. util.; 21,086 met.; gen. 120,000 kW, 16,000 kW oil, 98,500 kW gas. (steam turbine), 5,500 kW diesel, 200,079,000 kWh; pur. 365,387,000 kWh; rev. $28,776,157. (1911) [2]

GAINESVILLE REGIONAL UTILITIES, Box 490, Gainesville, 32602, 904/374-2910, Richard L. Hester, deputy city mgr. of util.; 43,696 met.; gen. 529,263 kW, 250,750 kW coal, 168,750 kW oil (steam turbine), 12,113 kW nuclear; 97,650 kW oil (comb. turbine); 1,017,905,700 kWh; sales 967,858,000 kWh; rev. $54,219,805. (1912) [2]

GREEN COVE SPRINGS, City of, 229 Walnut St., 32043, 904/284-5621; William Vermilling city mgr.; 1,990 met.; no gen.; sales 45,712,529 kWh; rev. $4,267,996. (1907) [2]

HAVANA, Town of, 711 N. Main St., Box 1068, 32333, 904/539-6493, C. G. Trippe, city mgr.; 1,186 met.; no gen.; pur. 11,941,519 kWh.; rev. $855,185. (1911) [2]

HOMESTEAD, City of, Power Plant, 790 N. Homestead Blvd., 33030, 305/247-1801, Warren Hinchee; 12,023 met.; gen. 62,680 kW, 20,180 kW oil (eng), 42,500 kW dual-fuel; 109,156,850 kWh; pur. 108,179,000 kWh; rev. $13,182,004. (1926) 2

JACKSONVILLE Elec. Authority, 233 W. Duval St., 32202, 904/633-4830, Royce Lyles, mg. dir.; 227,866 met.; gen. 1,990,300 kW, 1,554,600 kW oil, 435,700 kW oil-fired, 5,288,075,930 kWh; sales 5,771,433,000 kWh; rev. $411,317,000. (1895) 2

JACKSONVILLE BEACH Dept. of Elec. Utils., 11 N. Third St., Box 51389, 32250, 904/249-2381, Keith Roberts, dir. elec. util.; 13,428 met.; no gen.; pur. 229.5 million kWh; rev. $16,554,229. (1908) 2

KEY WEST, Utility Bd. of the City, 1001 James St., 33040, 305/294-5272, Thomas C. Kelly, mgr.; 17,425 met.; gen. 132,000 kW, 96,500 kW oil-fired steam, 13,500 kW oil-fired eng., 22,000 kW gas turbine, 364,156,959 kWh; pur. none; rev. $35,232,435. (1945) 2

KISSIMMEE, City of, Box 1608, 32741, 305/847-4912, James Walsh, util. dir.; 14,849 met.; gen. 30,350 kW; 5,000 kW oil; 20,350 kW dual-fuel; 5,000 kW nuclear; 144,781,300 kWh; pur. 156,530,000 kWh; rev. $18,444,834. (1901) 2

LAKELAND Elec. & Water Util., 1000 E. Parker St., 33880, 813/687-3636, R. G. Siegel, mg. dir., 63,139 met.; gen. 411,850 kW 349,500 kW steam, 56,850 kW gas turbine, 5,500 kW eng., 1,539,583,000 kWh; sales 1,247,706,672 kWh; rev. $83,564,036. (1904) 2

LAKE WORTH Utils. Auth., 114 College St., 33460, 305/586-1666, Larry Robbins, utils. dir., 21,984 met.; gen. 81,000 kW steam, 30,000 kW comb. turbine, 30,000 kW comb. cycle, 10,000 kW eng.; 290,600,000 kWh; sales 281,460,000 kWh; rev. $18,599,481. (1916) 2

LEESBURG, City of, Box 630, 32748, 904/787-4313, J. M. Tardugno, util. supt.; 14,194 met.; gen. 6,800 nuclear; 58,280,300 kWh; sales 240,285,886 kWh; rev. $17,099,117. (1926) 2

MOORE HAVEN Mun. Water & Light Dept., Box 399, 33471, 813/946-0711, Jack Smith, elec. supt.; 800 met.; no gen.; rev. $534,596. (1924?) 2

MOUNT DORA Utils., Box 176, 32757, 904/383-4221, Cecil Barks, dir. of util.; 4,020 met.; no gen.; pur. 53,010,000 kWh; rev. $4,165,324. 2

NEWBERRY Bd. of Public Works, Box 368, 32669, 904/472-2161, John W. Caldwell, util. dir.; 680 met.; no gen.; rev. $805,413. (1910) 2

NEW SMYRNA BEACH Util. Comm., 120 Sams Ave., 32069, 904/427-1361, R. Ronald Hagen, util. dir.; 11,500 met.; gen. 27,444 kW, 7,500 kW gas, 4,994 kW nuclear, 14,040 kW oil-fired, 910 kW dual-fuel, 140,874,981 kWh; pur. 125,150,000 kWh; rev. $9,810,442 (1922). 2

OCALA Utils., Box 1270, 32678, 904/629-8431, Dean G. Shaw, dir. of elec. util.; 27,770 met.; 10,760 kW nuclear, 94,257,600 kWh; sales 522,428,267 kWh; rev. $38,602,356. (1898) 2

ORLANDO Utils. Comm. Box 3193, 32802, 305/423-9100, Curtis H. Stanton, gen. mgr.; 88,305 met.; gen. 740,000 kW, 700,000 kW steam, 26,000 kW gas turbine, 13,000 kW nuclear; 1,000 kW diesel; 2,942.3 million kWh; pur. 26 million kWh; rev. $122,568,769. (1923) 0

QUINCY Mun. Elec. Dept., Drawer 941, 32351, 904/627-7681, William F. Johnson, city mgr., Otto Roberts, dir. of utils.; 4,088 met.; no gen.; pur. 108,707,000 kWh; rev. $4,572,512. (1904) 2

ST. CLOUD Utils., 1300 Ninth St., 32769, 305/892-2210, Jim Chisholm, city mgr.; 7,943 met.; 27,000 kW dual-fuel; 82,452,000 kWh; sales 96,127,200 kWh; rev. $7,824,868. (1916) 2

SEBRING Utils. Comm., Box 971, 33870, 813/385-0191, Donald L. Hornak, gen. mgr.; 9,200 met.; gen. 28,760 kW, 12,500 kW gas, 3,760 kW nuclear, 12,500 kW oil-fired, 79.4 million kWh; pur. 47.1 million kWh; rev. $8,197,724. (1923) 1

STARKE Light & Water Plant, 209 N. Thompson St., Drawer C, 32091, 904/964-5027, Merrell Dees, utils. dir.; 2,157 met.; pur. none; rev. $542,703. (1890) 2

TALLAHASSEE, City of, Elec. Dept., 2602 Jackson Bluff Rd., 32304, 904/576-1171, B. W. Wait III; 57,797 met.; gen. 549,442 kW, 464,250 kW gas & oil, 73,320 kW gas turbine, 11,872 kW nuclear, sales 1,539,000,000 kWh; rev. $82,501,151. (1902) 2

VERO BEACH, City of, Mun. Elec. Sys., Box 1389, 32960, 305/567-5151, John V. Little, city mgr./util. dir.; 20,330 met.; gen. 129,500 kW, 56,000 kW oil (steam turbine); 62,000 kW gas (steam turbine); 11,500 kW eng. (oil); 330,212,000 kWh; sales 530,401,957 kWh; rev. $27,824,515. (1919) 2

WAUCHULA Mun. Light & Water Dept., Box 818, 33873, 813/773-3131, Thomas M. Priest, supt., pub. works; 2,281 met.; gen. 7.2 thousand kW oil-fired eng., 2,368,700 kWh; pur. 44,249,000 kWh; rev. $2,713,427. (1924) 2

WILLISTON Mun. Elec. Dept., Box 160, 32696, 904/528-3060, Donald J. Tanner, util. dir.; 1,200 met.; no gen.; rev. $995,000. 2

GEORGIA

ACWORTH Water & Light Comm., 30101, Josep[illegible]riffis, supt.; no gen.; pur. 22.6 million kWh.

ADEL Lighting Dept., 112 N. Parish Ave., 31620, Harwell Sutton mgr.; no gen.; pur. 66 million kWh.

ALBANY Water, Gas & Light Comm., Box 1788, 31703, 912/883-8330, U. W. Rodemann, gen. mgr.; 32,643 met.; no gen.; sales 760,257,971 kWh; rev. $29,565,920. (1900) 2

BARNESVILLE, City of, 109 Forsythe St., Box 187, 30204, 404/358-0181, Ralph S. Barron, city supt.; 2,565 met.; no gen.; pur. 25,771,000 kWh; rev. $1,109,105. (1893) 2

BLAKELY, City of, Box 350, 31723, 912/723-3677, William M. Shingler, city admin.; 2,352 met.; no gen.; sales 46,564,676; rev. $2,211,139. (1917) 2

BRINSON, City of, City Hall, 31725, 912/246-5720, Ed Mitchell, mayor; no gen.; pur. 1,449,196 kWh; rev. $50,000. 2

BUFORD, City of, 30 Garnett St., 30518, 404/945-6761, Earley Biffle, city mgr.; 2,031 met.; no gen.; 26,832,778 kWh; rev. $994,729. 2

CAIRO, City of, Box 29, 31728, John W. Walker, city mgr.; 4,115 met.; no gen.; pur. 88,567,202 kWh; rev. $3,120,993. (1902) 2

CALHOUN, City of, Box 924, 30701, 404/629-2276, Jack H. Bell, elec. supt.; 2,514 met.; no gen.; pur. 125,471,562 kWh; rev. $4,469,468. (1900) 2

CAMILLA, City of, Box 328, 31730, 912/336-5636, Clarence H. Bryant, city mgr.; 2,[illegible]00 met.; no gen.; pur. 52,922,220 kWh; rev. $1,979,890. (1925) 2

CARTERSVILLE Elec. System, 4 Cook St., Box 529, 30120, 404/382-1171, ext. 237 or 238, Ralph L. Oglesby, supt.; 4,487 met.; no gen.; pur. 247.8 million kWh; rev. $8,008,100. (1905) 1

CHICKAMAUGA Elec. System, Box 68, 30707, 404/375-3177, Mike McDonald, mgr.; 775 met.; no gen.; sales 239,801,354 kWh; rev. $8,023,401. (1963) 2

COLLEGE PARK, City of, 1886 W. Harvard Ave., 30337, 404/761-5273, Robert W. Dudley, elec. dept. dir.; 10,000 met.; no gen.; pur. 202.1 million kWh; rev. $6,190,890. 0

COMMERCE, City of, Box 348, 30529, 404/335-3164, Paul Vickery, gen. mgr.; 1,540 met.; no gen.; pur. 36,727,885 kWh; rev. $1,334,342 2

COVINGTON Mun. Water & Light Dept., 30209, Frank B. Turner, city mgr.; 4,400 met.; no gen.; pur. 107.9 million kWh.

CRISP COUNTY POWER COMMISSION, Box 1218, Cordele, 31015-1218, 912/273-3811, Frank L. Olson, mgr.; 9,096 met.; gen. 30,500 kW, 12,500 kW coal, 5,000 kW gas turbine, 13,000 kW hydro, 47,215,100 kWh; pur. 149.8 million kWh; rev. $6,805,838. (1927) 2

DALTON Utilities, Box 869, 30720, 404/278-1313, Robert Roundtree, gen. mgr.; 9,537 met.; pur. 602 million kWh; rev. $21,630,921. (1890) 2

DOERUN Water & Light Plant, 31744, 912/782-5444, J. B. Walters supt.; 470 met.; no gen.; pur. 5.4 million kWh. (1911)

DOUGLAS Water & Light Comm., Drawer 470, 31533, 912/384-1695, William F. Pierce, mgr.; 4,464 met.; no gen.; pur. 104.8 million kWh; rev. $3,944,002. (1905) 0

EAST POINT, City of, Elec. Utils. Dept. 2847 S. Main St., (City Hall Annex), 30344, 404/765-1026-27, Marshall J. Collins, dir.; 15,878 met.; no gen.; sales 256,126,938 kWh; rev. $10,710,916. 2

ELBERTON, City of, Elec. Util., 234 N. McIntosh St., 30635, 404/283-2575, J. N. Jackson, supt.; 4,196 met.; no gen.; pur. 73.7 million kWh; rev. $2,798,700. (1895) 2

ELLAVILLE Mun. Elec. Light Plant, 31806, Virginia R. Whaley, city clerk; 705 met.; no gen.; pur. 9 million kWh; rev. $241,657. 1

FAIRBURN Electrical Dept., 30213, 404/964-2244, Alex Howell Sr., city admin.; 1,538 met.; no gen.; pur. 24,902,100 kWh; rev. $968,670. 2

FITZGERALD Water, Light & Bond Comm., Drawer F, 31750, 912/423-2016, James H. Smith, supt.; 5,160 met.; no gen.; sales 108,703,295 kWh; rev. $3,808,699. (1903) 2

FORSYTH, City of, 31029, Guy F. Walker, supt.; no gen.; pur. 38.6 million kWh.

FORT VALLEY, City of, Util. Comm., Box 529, 31030, 912/825-7701, Fred J. Sankey, elec. supt.; 4,104 met.; no gen.; pur. 5,312,175 kWh; rev. $351,135. (1905) 2

GRANTVILLE Water & Light Comm., Box 126, 30220, 404/583-2289, Paul F. Musick Jr., mayor; 500 met.; no gen.; pur. 3,906,684 kWh; rev. $130,000. 2

GRIFFIN, City of, Box 797, 30224, 404/229-1506, Clifford Hutson, dir.; 11,352 met.; no gen.; sales 180,936,000; rev. $7,145,687. (1895) 2

HAMPTON Elec. Dept., 30228, 404/946-4306, Martha Barnette, city clerk; 740 met.; no gen.; pur. 40,000 kWh; rev. $450,000. 2

HOGANVILLE Mun. Light Plant, 103 Main St., 30230, David Street, supt.; no gen.; pur. 13.7 million kWh. 0

JACKSON, City of, Box 3838, 30233, 404/775-7535, S. V. Lunsford, elec. dept. supt.; 1,344 met.; no gen.; pur. 23,918,126 kWh; $1,016,857. (1900) 2

LA FAYETTE Mun. Elec. Dept., Box 89, 30728, 404/638-1082; Paul Van Dusen, supt.; Grady McCalmon, city mgr.; 3,313 met.; no gen.; pur. 74 million kWh; rev. $2,653,732. (1925) 2

LA GRANGE, City of, Box 430, 200 Ridley Ave., 30240, 404/884-7386, H. B. Lovvorn, city mgr.; 10,292 met.; no gen.; sales 243,947,000 kWh; rev. $9,478,124. (1900) 2

LAWRENCEVILLE, City of, 405 S. Clayton St., 30245, 404/963-2414, Don Martin, mgr.; 3,890 met.; no gen.; pur. 89,581,141 kWh; rev. $2,984,648. (1920) 2

MANSFIELD, Town of, Box 35, 30255, 404/786-7235, Pat Mullins, asst. city clerk; 210 met.; no gen.; sales 2,489,070 kWh; rev. $105,122. 2

MARIETTA Board of Lights & Water, 205 Lawrence St., 30060, 404/429-4246, Jack Crane, city mgr.; 26,714 met.; no gen.; pur. 500,699,551 kWh; rev. $19,875,326. (1903) 2

MONROE Water, Light & Gas Comm., Box 725, 30655, 404/267-5756, John T. Briscoe Jr., supt.; 3,831 met.; no gen.; pur. 74,836,391 kWh; rev. $2,254,086. (1905) 2

MONTICELLO, City of, 115 E. Greene St., 31064, 404/468-6062, John F. Singletary, supt.; 1,094 met.; no gen.; sales 14,320,109 kWh; rev. $567,882. 2

MOULTRIE, City of, Box 580, 31768, 912/985-6710, Darrell Wiggins, util. dir.; 6,289 met.; no gen.; pur. 241.9 million kWh. 0

NEWNAN Water, Sewerage & Light Comm., 70 Sewell Rd., 30263, 404/253-5516, Carl G. Miller, gen. mgr.; 4,864 met.; no gen.; pur. 75,820,536 kWh; rev. $3,483,917. (1904) 2

NORCROSS, City of, 30071, Doug Wood, elec. supt.; no gen.; pur. 23.1 million kWh.

OXFORD Water & Light System, 810 Wah[illegible]oat St., 30267, 404/786-7004, E.V. Moss, supt.; 600 met., no gen. 2

PALMETTO City, 549 Main St., 30268; 404/463-3377, Charles Montgomery, city admin.; 750 met.; no gen.; pur. 277,067 kWh; rev. $521,974. 2

QUITMAN Elec. Dept., 31643, J. P. Griffin, supt.; no gen.; pur. 33.8 million kWh.

SANDERSVILLE, City of, Elec. Dept., Box 71, 912/552-2525, C. C. Wright, supt.; 2,000 met.; no gen.; pur. 40 million kWh.

SYLVANIA, City of, Box 555, 30467, 912/564-7411, E. K. Overstreet, city mgr.; 2,056 met.; no gen.; sales 92,977,000 kWh; rev. $3,331,382. (1910) 2

SYLVESTER Water & Light Plant, Box 368, 31791, 912/776-3941, Charles Jones, supt.; 2,500 met.; no gen.; pur. 48.7 million kWh; rev. $1,800,000. (1903)

THOMASTON, City of, Elec. Dept., Box 672, 30286, 404/647-4242, Frank Spraggins, elec. supt.; 4,163 met.; no gen.; pur. 60,794,000 kWh; rev. $1,731,378. 2

THOMASVILLE Water & Light Dept., 411 W. Jackson St., Box 1397, 31792, 912/226-3518, J. B. Smith, gen. supt.; 11,007 met.; no gen.; sales 275,694,280 kWh; rev. $10,276,877. (1906) 2

WASHINGTON Elec. Dept., Box 9, 30673, 404/678-3277, L. W. Hardy, supt.; 2,040 met.; no gen.; pur. 63.4 million kWh; rev. $1,900,000. (1897) 0

WEST POINT, City of, Box 487, 31833, 404/645-2226, John F. Meadors, admin.; 1,584 met.; no gen.; pur. 30,157,858 kWh; rev. $1,327,907. (1900) 2

WHIGHAM Elec. Dept., Box 71, 31797, Cecil Gibbs Jr., supt.; 180 met.; no gen.; pur. 4 million kWh.

IDAHO

ALBION Light & Water Plant, Box 163, 83311, 208/673-5331, H.W. Chris Cagle, mayor; 155 met.; no gen.; pur. 3 million kWh; rev. $30,000. (1916) 0

BONNERS FERRY Light and Water Dept., Box 149, 83805, 1-208/267-3105, Richard Cook, city admin.; 1,912 met.; gen. 6,390 kW, 2,450 kW hydro, 2,440 kW eng., 21,000,000 kWh; pur. 40,000,000 kWh; rev. $1,400,000. (1922) 2

BURLEY, City of, 2020 Park Ave., 83318, 208/678-2538, Donald R. Hill, utils. dir., 4,425 met.; no gen.; sales 105,759,319 kWh; rev. $2,157,978. 2

DECLO City of, Box 141, 83323, 208/654-6391, Nuelda Matthews, clerk, 104 met.; no gen.; pur. 2,798,719 kWh; rev. $24,561 (1910) 2

DUBOIS Elec. System, Box 27, 83423, 208/374-5241, Charles R. Walstrom; 215 met.; no gen.; pur. 2,500,000 kWh; rev. $118,208. (1919) 2

HEYBURN, City of, Box 147, 83336, 208/678-8158, Larry Burbank, supt.; 1,023 met.; no gen.; sales 65,173,966 kWh; rev. $912,851. (1910) 2

IDAHO FALLS, City of, Box 220, 83402-0220, 208/529-1430, Steve Harrison, mgr.; elec. div.; 17,432 met.; no gen., sales 427,414,289 kWh; rev. $8,170,519. (1900) 2

MINIDOKA, City of, 83343, Deon Fassett, clerk; 55 met.; no gen.; pur. 1 million kWh. (1924)

PLUMMER Elec. Dept., 83851, 208/686-1422, W. T. Neibuhr, mgr.; 550 met.; no gen.; pur. 13 million kWh; rev. $258,000. (1916) 1

RUPERT, City of, Elec. Dept., Box 426, Civic Bldg., 83350, 208/436-9608, Elmer V. Schenk, mgr.; 2,600 met.; no gen.; pur. 75,000,000 kWh; rev. $1,100,000. (1919) 2

SODA SPRINGS Mun. Power & Light, 9 W. Second St., 83276, 208/547-2151, Gary Jensen, supt.; 1,400 met.; gen. 580 kW hydro, 2.3 million kWh; pur. 19 million kWh; rev. $856,000. (1908) 0

WEISER, City of, Electric, 55 W. Idaho St., 83672, 208/549-1965, Keith Herrick, supt.; 2,500 met.; no gen.; pur. 36 million kWh; rev. $535,267. (1908) 1

WORLEY, City of, Box 218, 83876, 208/686-1258, Sally A. Holt, city clerk; 110 met.; no gen.

ILLINOIS

ALBANY Elec. Dept., Box 356, 61230, 309/887-4901, Gary Gooch, supt.; 400 met.; no gen.; pur. 3,848,635 kWh; rev. $148,959. 2

ALLENDALE Mun. Util., Box 85, 62410, 618/299-3151, Robert K. Kight, supt.; 278 met.; no gen.; sales 2,500,000 kWh; rev. $144,600. (1949) 2

ALTAMONT Mun. Elec. Light Plant, 601 W. Madison Ave., 62411, 618/483-5108, Dallas Fairley, supt.; 870 met.; gen. 3,800 kW eng.; rev. $246,616.

BATAVIA, City of, 101 N. Island Ave., 60510, 312/879-1424, Mario Perez, supt. of elec.; 4,257 met.; no gen.; pur. 69.6 million kWh; rev. $2,163,607.

BETHANY Power Dept., Box 352, 61914, 217/665-3351, Frank Roby Jr., supt.; 648 met.; no gen.; sales 5,896,835 kWh; rev. $370,513. (1916) 2

BREESE City of, 800 N. First St., 62230, 618/526-7151, Martin Johnson, supt.; 1,437 met.; gen. 8,900 kW, 2,000 kW oil, 900 kW oil-fired, 6,000 kW dual-fuel, 143,000 kWh; pur. 21,232,700 kWh; rev. $1,090,963. (1906) 2

BUSHNELL Mun. Utility, 148 E. Hail St., 61422, 309/772-2029, Bert L. Sammons, mgr.; 1,278 met.; gen. 23,180 kW oil-fired, 96,000 kW gas-fired, pur. 22,574,800 kWh; rev. $1,253,509. (1941) 2

CAIRO Pub. Util. Comm., 1100 Commercial Ave., 62914, 618/734-3200, Karl H. Klein, mgr.; 2,704 met.; no gen.; sales 75,524,946 kWh; rev. $3,360,239. (1947) 2

CARLYLE Mun. Util., 850 Franklin, 62231, 618/594-3321, Edward H. Kleber, supt. of utils.; 1,506 met.; gen. 9,250 kW oil, 237,000 kWh; sales 20,099,855 kWh; rev. $1,068,973. (1901) 2

CARMI Light & Water, Box 65, 62821, 618/382-8118, J. B. Brown, mayor; 3,800 met.; gen. 1,670 kW oil-fired, 12,730 kW dual-fuel, 18,336,100 kWh; pur. 916,187 kWh; rev. $2,283,716. (1925) 2

CASEY, City of, Box 425, 108 E. Main, 62420, 217/932-4885, Ray Mitchell, supt. of utils.; 1,780 met.; no gen.; pur. 24,048,000 kWh; rev. $1,395,706. 2

CHATHAM, Village of, 117 E. Mulberry, 62629, 217/483-2451, Tony Moore, supt., 2,000 met.; no gen.; pur. 34,330,800 kWh; rev. $1,011,398. (1942) 2

FAIRFIELD Mun. Light Plant, N.W. 6th St., 62837, 618/842-4821, Claude Trotter, supt., 3,322 met.; gen. 7,500 kW, 12,500 kW steam, 7,500 kW eng., 2.5 million kWh; pur. 2.5 million kWh; rev. $2,342,868. (1898)

FARMER CITY, Mun. Power Plant, East Allen St., 61842, 309/928-6421, Harold Miller, supt.; 1,197 met.; gen. 2,430 kW oil, 5,050 dual-fuel eng.; rev. $966,539. (1895) 2

FLORA Mun. Light Plant, 62839, Box 249, 618/662-5131, Jean Hall, city clerk, 3,122 met. 2

FREEBURG Mun. Light Plant, 101 S. Beliville St., 62243, 618/539-3112, Frank Lakatos, supt.; 1,450 met.; pur. 17,000,000 kWh (est); rev. $1,300,000 (est). 2

GENESEO Mun. Elec. Light & Power Plant, 433 E. North St., 61254, 309/944-2617, Tom Gorman, supt.; 3,113 met.; gen. 1,000 kW oil, 18,000 kW dual-fuel eng.; 16,739,000 kWh; sales 39,604,287 kWh; rev. $2,332,390. (1933) 2

GENEVA Mun. Elec. System, 2 W. State St., 60134, 312/232-1503, Reginald Fellhauer, dir.; 4,306 met.; no gen.; pur. 102.6 million kWh; rev. $5,049,000. (1894) 1

GREENUP Light & Power Dept., 62428, John D. Carr, supt.; 806 met.; no gen.; pur. 5.2 million kWh; rev. $131,925. (1954)

HIGHLAND, City of, Elec. Dept., 1115 Broadway, 62249, 618/654-7511, D. G. Williams, city mgr.; 4,000 met.; gen. 12,000 kW dual-fuel; sales 85,800,000 kWh; rev. $4,250,000. (1899) 2

LADD Electric Light Dept., 126 N. Main St., 61329, 815/894-2351, Clarence Foster, supt.; 550 met.; no gen.; pur. 3.5 million kWh. 1

MARSHALL, City of, Box 298, 62441, 217/826-8386, George Smith, supt.; 2,051 met.; no gen.; sales 24,665,818 kWh; rev. $1,503,897. 2

MASCOUTAH Power & Light Dept., 40 W. Union, 62258, 618/566-2965, D. L. Sitton, city mgr.; 2,077 met.; gen. 10,102 kW, 3,500 kW coal, 2,248 kW oil-fired, 4,354 kW dual-fuel, 778,000 kWh; pur. 26.4 million kWh; rev. $1,422,365. 1

McLEANSBORO Mun. Light & Water Plant, 102 W. Main, 62859, William Campbell, supt.; 1,700 met.; gen. 8,625 kW dual-fuel eng., 503,600 kWh; pur. 16,335,740 kWh. (1897) 2

METROPOLIS, City of, 106 W. Fifth St., 62960, 618/524-4016 or 4212, Jack Rushing, light supt.; 3,300 met.; no gen. 2

NAPERVILLE Elec. Dept., 175 W. Jackson Ave., 60566-1002, 312/410-6181, Victor Marma, dir. elec. dept.; 15,913 met.; no gen.; sales 299,830,185 kWh; rev. $19,095,384. (1899) 2

NEWTON Light & Water Works, 108 N. Van Buren, 62448, 618/783-8451, Bob Reynolds, supt.; 1,565 met.; no gen.; pur. 24,100,000 kWh; rev. $1,279,228. (1925) 2

OGLESBY, City of, 128 W. Walnut St., 61348, 815/883-8621, Joe Popurella, util. supt.; 1,693 met.; no gen.; sales 14,800,899 kWh; rev. $811,377. (1910) 2

PERU Light Dept., City Hall, 1415 Water St., 61354, 815/223-0044, Donald Baker, mayor; 4,300 met.; gen. 33,000 kW, 15,250 kW steam, 11,500 kW gas turbine, 6,250 kW eng., 58 million kWh; pur. none; rev. $2,700,000. (1892)

PRINCETON Mun. Utils., 2 S. Main St., 61356, 815/872-5551, Steve Finn, mgr.; 4,015 met.; gen. 38,350 dual-fuel, 30.3 million kWh; pur. 35.3 million kWh; rev. $3,399,272. (1900) 1

RANTOUL, Village of, 200 W. Grove St., 61866, 217/892-2178, Glenn E. Tadlock, supt.; 5,076 met.; 16,832 kW dual-fuel, 1.5 million kWh; pur. 69.6 million kWh; rev. $3,725,876. (1898) 1

RED BUD, City of, Utils., 525 Power St., 62278, 618/282-3339, Ronald Burgdorf and LeRoy Bievenue, co-supts., 1,329 met.; gen. 10,312 kW, 1,556 kW oil-fired eng., 8,756 kW dual-fuel eng., 285,900 kWh; pur. 24,474,000 kWh; rev. $1,297,307. (1904) 2

RIVERTON, Village of, 313 E. Jefferson St., 62561, 217/629-9122, Michael Brewer, supt.; 1,179 met.; no gen.; pur. 12,657,600 kWh; rev. $799,454. 2

ROCHELLE Mun. Utils., 120 N. Seventh St., 61068, 815/562-4155, Theodore W. Volding, gen. supt.; 5,524 met.; gen. 11,150 kW coal, 3,710 kW oil-fired, 15,720 kW dual-fuel; sales 104,349,910 kWh; rev. $6,317,177. (1893) 2

ROCK FALLS, Elec. Dept., 205 E. Third St., Box 578, 61071, 815/625-0949, Robert O'Donnell, dir.; 5,034 met.; no gen.; pur. 63,000,000 kWh; rev. $2,652,953. (1895) 2

ROODHOUSE Mun. Power & Light, 119 W. Palm, 62082, 217/589-4635, Jim Holder, mayor; 895 met.; no gen.; pur. 89,310,000 kWh; rev. $541,007. 2

ST. CHARLES, City of, 2 E. Main St., 60174, 312/377-4407, Patrick J. Boyle, dir. elec. util.; 7,315 met.; no gen.; sales 184,830 kWh; rev. $11,798,371. (1892) 2

SPRINGFIELD City Water, Light & Power, Municipal Bldg., 7th & Monroe Sts., 62757, 217/789-2120, Paul Bonansinga, comm. pub. property; 54,178 met.; gen. 529,000 kW, 41,000 kW comb. turbine, 473,000 kW coal, 15,000 kW oil, 1,559,082 kWh; sales 1,542,666 kWh; rev. $69,730,001. (1906) 2

SULLIVAN, City of, Mun. Utils., 2 W. Harrison St., 61951, 217/728-7622, Bill Harris, supt. elec. dept.; 2,284 met.; gen. 15,475 kW eng., 29.2 million kWh; pur. 6.4 million kWh; rev. $1,396,681. (1917) 0

WATERLOO Mun. Light & Power, 104 W. Fourth St., 62298, 618/939-6413, Art Fischer, supt.; 2,011 met.; gen. 11,448 kW eng., 193,000 kWh; pur. 27,992,000. (1900) 2

WINNETKA Elec. Mun. Plant, 510 Green Bay Rd., 60093, 312/446-2500, Gary L. Zimmerman, supt.; 5,086 met.; gen. 27,300 kW; 22,500 kW coal, 22,500 kW gas, 4,800 kW oil-fired, 2.9 million kWh; pur. 75.8 million kWh; rev. $5,210,000. (1900) 1

INDIANA

ADVANCE, Town of, 112 N. Main St., 46102, 317/676-6611; G. Yount, supt.; 276 met.; no gen.; pur. 3,337,600 kWh; rev. $97,700. 2

ANDERSON Mun. Light & Power, 550 Baxter Rd., 46011, Charles J. Myers, supt.; 317/646-5741; 33,765 met.; no gen.; sales 490,633,208 kWh; rev. $20,726,935. (1897) 2

ARGOS Mun. Electric, 119 W. Walnut St., 46501, 219/892-5717, Wilmer Harley, supt.; 1,548 met.; no gen.; pur. 12,212,990 kWh; rev. $733,625. 2

AUBURN Elec. & Water Dept., Cedar & Ninth Sts., 46706, 219/925-5430, Clyde James, elec. supt.; 4,500 met.; no gen.; pur. 149,040,000 kWh; rev. $5,754,664. (1900) 2

AVILLA Elec. Dept., 117-21 S. Main St., 46710, 219/897-3651, Paul Bolinger, supt.; 398 met.; no gen.; pur. 2.5 million kWh. 0

BAINBRIDGE, Town of Mun. Elec. System, Box 343, 46105, 317/522-6238, James Nelson, supt.; 326 met.; no gen.; pur. 3,518,400 kWh; rev. $128,709. (1915) 2

BARGERSVILLE Power & Light, Box 420, 46106, 317/422-5115, Joe M. Harrod, supt.; 1,600 met.; no gen.; pur. 21,626,400 kWh; rev. $884,448. (1921) 2

BLUFFTON Utils. Elec Dept., 128 E. Market St., 46714, 219/824-2500, Edward C. Davis, supt.; 4,334 met.; gen. 2,000 kW, 2,000 kW oil-fired, 5,000 kW dual-fuel, 3,551,400 kWh; pur. 95,270,400 kWh; rev. 3,573,216. (1892) 2

BOONEVILLE Mun. Elec. Plant, 113 S. Second St., 47601, 812/897-0140, Charles Davis, supt.; 1,700 met.; no gen.; rev. $484,277. 0

BREMEN Elec. Light & Power Co., 123 S. Center St., 46506, 219/546-4324, Dudley A. Keyser, supt.; 1,732 met.; no gen.; sales 37,992,087 kWh; rev. $1,918,134. (1895) 2

BROOKLYN Mun. Util, 46111, 317/831-3343, Dan Brenton, supt.; 360 met.; no gen; rev. $142,925. 2

BROOKSTON Mun. Elec. Co., 205 E. 3rd St., Box 187, 47923, 317/563-3171, Charles L. Fountain, supt.; 758 met.; no gen.; pur. 10,693,200 kWh; rev. $500,000. (1916) 2

CANNELTON Utils., 610 Washington St., 47520, 812/547-7919, Steve Gaynor, gen. mgr.; 1,048 met.; no gen.; pur. 15,222,600 kWh; rev. $645,000. 2

CENTERVILLE Mun. Elec. Light & Power Dept., Box 307, 47330, 317/855-2191, James Bowen, supt.; 1,000 met.; no gen.; pur. 12 million kWh. 0

CHALMERS Mun. Elec. Dept., 47929, 219/984-5494, Ralph Nevitt, town bd. pres.; 303 met.; no gen.; pur. 3.2 million kWh, rev. $182,361. 1

COATESVILLE Mun. Light & Power Dept., Box 143, 46121, 317/386-7490, James Rollings, supt.; 268 met.; no gen.; pur. 2,994,400 kWh; rev. $91,782 (1912) 2

COLUMBIA CITY Mun. Elec. Dept., City Hall, S. Chauncey St., 46725, 219/244-5141, Gene Sheets, foreman; 3,531 met.; no gen.; pur. 69,252,000 kWh; rev. $2,658,602. 2

COVINGTON Elec. Dept., 413 Washington St., 47932, 317/793-2421, Gene Hulbert, supt.; 1,411 met.; no gen.; pur. 21 million kWh; rev. $845,755. (1913) 1

CRAWFORDSVILLE Electric Light & Power, Box 428, 47933, 317/362-1900, Roy E. Kaser, mgr.; 7,584 met.; gen. 24,150 kW coal, 86,680,190 kWh; sales 199,609,830 kWh; rev. $7,515,783. (1892) 2

DARLINGTON Light & Power Co., 104 S. Franklin St., 47940, 317/794-4496, Wesley D. Tribbett, supt.; 552 met.; no gen.; sales 7,478,592 kWh; rev. $332,546. (1919) 2

DUBLIN Mun. Elec., Box 145, 47335, 317/478-4878, Monica V. Davis, clerk-treas.; 453 met.; no gen.; sales 4,080,000 kWh; rev. $19,076. (1920) 2

DUNREITH Elec. Light Dept., 47337, 317/987-7474, Shelby Linville, clerk-treas.; 200 met.; no gen.; rev. $51,000. 1

EDINBURGH Mun. Utils., 107 S. Holland, 46124, 812/526-6333, Richard Galbreath, supt.; 2,150 met.; no gen.; pur. 56,409,600 kWh; rev. $1,747,682. (1898) 2

ETNA GREEN Elec. Light Dept., 46524, 219/387-3835, William Price, supt.; 200 met.; no gen.

FERDINAND Mun. Elec. Dept., W. Fifth St., Box 7, 47532, 812/367-1011, James R. Meyer, supt.; 647 met.; no gen.; pur. 12,858,000 kWh; rev. $447,954. (1922) 2

FLORA Elec. Util., 27 W. Main, 46929, 219/967-4844, Charles Everett, util. mgr.; 1,200 met.; no gen.; pur. 20,894,240 kWh; rev. $811,346. (1946) 2

FRANKFORT City Light & Power, 16 N. Main St., Box 578, 46041, 317/659-3362, John F. Shelburne, supt.; 8,350 met.; pur. 170 million kWh; rev. $5,846,902. (1902) 0

FRANKTON Light & Water Co., Box 286, 46044, 317/754-7285, Dale Swaim, supt.; 989 met.; no gen.; pur. 14,469,600 kWh. 2

GARRETT Mun. Utils., S. Randolph St., 46738, 219/357-4400, William Rex Frain, supt.; 2,400 met.; no gen.; sales 35,684,519 kWh; rev. $1,620,006. (1896) 2

GAS CITY Light Dept., 211 E. Main, 46933, 317/674-5660, Ted Stichler, util. engr.; 2,518 met.; no gen.; pur. 33,979,200 kWh; rev. $1,387,184. 2

GREENDALE Utils., 510 Ridge Ave., Lawrenceburg, 47025, 812/537-2125, F. R. Rudolph, supt.; 1,655 met.; no gen.; sales 81,372,777 kWh; rev. $2,174,449. (1934) 2

GREENFIELD Elec. Mun. Co., 110 S. State St., 46140, 317/462-5412, Dick Towne, supt.; 4,602 met.; no gen.; sales 78,997,426 kWh; rev. $2,799,183. 2

HAGERSTOWN Mun. Light Dept., 49 E. College St., 47346, 317/489-5132, Ron Roach, supt.; 1,200 met.; no gen.; pur. 18,000,000 kWh; rev. $720,700. (1923) 2

HUNTINGBURG Mun. Elec. Util., 511 Fourth St., 47542, 812/683-2211, Loma Wm. Hartke, supt.; 2,648 met.; no gen.; sales 42,575,065 kWh; rev. $1,948,648. 2

JAMESTOWN Mun. Light Dept., 46147, 317/676-7331, W. D. Henry, supt.; 348 met.; no gen.; pur. 3.6 million kWh.

JASPER Mun. Elec. Util., E. Fifteenth St., Box 150, 47546, 812/482-3003, Donald Ferguson, elec. dept. mgr.; 4,343 met.; gen. 14,500 kW coal, 61.1 million kWh; pur. 83 million kWh; rev. $4,977,150. (1904) 1

KINGSFORD HEIGHTS Mun. Util., 46346, 219/393-3309, Don Cooper, supt.; 530 met.; no gen. 1

KNIGHTSTOWN Light Utility, 26 S. Washington St., 46148, 317/345-5977, Lillian Williams, clerk-treas., 1,578 met.; no gen., pur. 17,628,800 kWh; rev. $617,861. (1894) 2

LADOGA Light Dept., 47954, 317/942-2531, James Cross, mgr.; no gen. 0

LAWRENCEBURG Mun. Utils., 405 Main St., Box 112, 47025, 812/537-2420, Roland Horney, dir. of utils.; 2,566 met.; no gen.; pur. 55 million kWh; rev. $2,130,410. 1

LEBANON, City of, Utils. 201 E. Main St., Box 479, 46052, 317/482-5100, James B. Nelson, mgr.; 5,485 met.; no gen.; pur. 94,356,000 kWh; rev. $3,433,653. (1942) 2

LEWISVILLE Mun. Light Dept., 47352, 317/987-7979, Robert Harris, supt.; 200 met.; no gen. 0

LINTON Mun. Elec., 49 N.W. "A" St., 47441, 812/847-4971, William McNew, supt.; 3,365 met.; no gen.; pur. 41,145,420 kWh; rev. $1,476,581. (1912) 2

LOGANSPORT Mun. Utils., City Bldg., 601 E. Broadway, 46947, 219/753-6119, Steve Kovacs, mgr.; 12,843 met.; gen. 56,000 kW, 39,000 kW steam, 17,000 kW gas turbine, 114.2 million kWh; pur. 146.3 million kWh; rev. $9,581,631. 1

MIDDLETOWN Elec. Util., 102 N. Fifth St., 47356, 317/354-2911, Richard Westrater, supt.; 910 met.; no gen.; pur. 4.7 million kWh; rev. $122,979.

MISHAWAKA Mun. Utils., 126 N. Church St., Box 363, 46544, 219/259-4242; Lawrence L. Hewett, gen. mgr.; 19,030 met.; no gen.; sales 249,931,147 kWh; rev. $10,769,907. (1895) 2

MONTEZUMA Mun. Utils., 111 Crawford St., 47862, 317/245-2759, Leroy Waymire, field supvr.; 779 met.; no gen.; pur. 3.3 million kWh. 0

NEW CARLISLE Mun. Elec. Util., 113 S. Arch St., 46552, 219/654-3733, Cecil McCollum, town electrician, 620 met.; no gen.; pur. 7.1 million kWh; rev. $246,730. (1905) 1

NEW ROSS Elec. Service Dept., 47968, 317/723-1154, Harold Poland, supt.; 180 met.; no gen.; pur. 1.2 million kWh; rev. $33,078. 0

PAOLI Water & Light Dept. Public Square, 47454, 812/723-2739, Herbert Bostock, supt.; no gen. 0

PENDELTON Mun. Util., 122 E. State St., Box 230, 46064, 317/778-4613, Jack Guard, supt.; 1,527 met.; no gen.; pur. 21 million kWh; rev. $847,251. 1

PERU, City of. Elec. Dept., Box 67, 46970, 317/473-6681, William H. Buffington, mgr.; 9,616 met.; gen. 22 kW coal, 83,298,000 kWh; sales 145,643,021 kWh; rev. $5,931,685. (1903) 2

PITTSBORO Mun. Light Plant, 46167, 317/892-3435, Charles Water, supt.; no gen. 0

RENSSELAER Mun. Elec. Util., 122 S. Van Rensselaer St., 47978, 219/866-8475, Roger B. Merriman, mayor, 2,639 met.; gen. 14,120 kW eng., 45,616,932 kWh; pur. 45,616,932 kWh; rev. $2,430,641. (1897) 2

RICHMOND Power and Light, U.S. 27 South, Box 908, 47374, 317/935-3131, Irving A. Huffman, gen. mgr.; 20,144 met.; gen. 93,000 kW coal, 457,743,260 kWh; sales 548,848,900 kWh; rev. $22,523,080. (1904) 2

RISING SUN Mun. Utils., First and Poplar Sts., 47040, 812/438-3616, Neal Hastings, supt.; 1,283 met.; no gen.; pur. 16,908,263 kWh; rev. $607,346. (1939) 2

ROCKVILLE Elec. Light Plant, 105 W. High St., 47872, 812/569-5145, James Skelton, supt.; 1,600 met.; no gen.; pur. 13.2 million kWh; rev. $223,370.

SCOTTSBURG Mun. Elec. Light Dept., 55 N. First St., 47170, 812/752-3199, Herbert Robison, supt.; no gen.

SOUTH WHITLEY Mun. Elec. Light Dept., Box 372, 118 E. Front St., 46787, 219/723-4741, Meredith A. Slater, supt.; 822 met.; no gen.; pur. 12.4 million kWh; rev. $556,084. (1895) 1

SPICELAND Mun. Light Plant, 47385, 317/987-7365, William Acton, supt.; 500 met.; no gen. 0

STRAUGHN Mun. Elec. Plant, 47387, 317/891-3166, Eldon Sons, supt.; 163 met.; no gen.; pur. 1 million kWh; rev. $25,000.

TELL CITY Elec. Dept., Box 9, City Bldg., 47586, 812/547-3201, Jack M. Joyce, supt.; 4,077 met.; no gen.; sales 98,430,107 kWh; rev. $4,134,554. (1941) 2

THORNTOWN Utils., 109 W. Main St., 46071, 317/436-2627, Jack Hutchens, supt.; 715 met.; no gen.; pur. 8,6[illegible]2,000 kWh; rev. $322,849. (1951) 2

TIPTON Light and Power Co., 225 E. Jefferson St., 46072, 317/675-7292, (vacancy), gen. mgr.; 3,622 met.; no gen.; sales 65,545,609 kWh; rev. $2,298,664. (1901) 2

TROY Utils., Box 57, 47588, 812/547-7501, Charles Kuntz, supt.; 312 met.; no gen.; pur. 3,662,400 kWh; rev. $203,524. (1941) 2

VEEDERSBURG Mun. Elec. Util., 118 Railroad Ave., 47987, 317/294-2728, Charles R. Shelton, supt.; 1,025 met.; no gen.; pur. 11,611,200 kWh; rev. $411,760. (1898) 2

WALKERTON Elec. Dept., 510 Roosevelt Rd., 46574, 219/586-3613, Marvin Williams, supt.; 1,050 met.; no gen.; pur. 12.7 million kWh.

WARREN Elec. Util., Box 477, 46792, 219/375-2656, Steve Furni[illegible], supt.; 750 met.; no gen.; pur. 5.7 million kWh.

WASHINGTON City Light & Power, Utility Bldg., E. 21st St., 812/254-5171, Brayton Nalker, supt.; 7,100 met.; no gen.; pur. 100 million kWh; rev. $2,341,736. (1920)

WAYNETOWN Mun. Elec. Dept., Box 215, 47990, 317/234-2154, Richard Peterman, supt.; 470 met.; no gen.; rev. $150,881. 1

WILLIAMSPORT Elec. Util., 29 N. Monroe St., 47993, 317/762-3257, Richard S. Briles, Pres. Town Bd., 780 met.; no gen.; pur. 11,302,800 kWh; rev. $412,118. (1899) 2

WINAMAC Mun. Light & Water Works, 120 Main St., 46996, 219/946-3451, A. Allen Boos, mgr.; 1,578 met.; no gen.; sales 30,564,428 kWh; rev. $1,550,141. (1898) 2

IOWA

AFTON Mun. Elec. Light, City Hall, 50830, 515/338-2263, Gary D. Kelley, 447 met.; no gen.; pur. 5,193,600 kWh; rev. $236,396. 2

AKRON Municipal, Box 85, 51001, 712/568-2041, Ellis Tucker, clerk; 780 met.; sales 8,593,604 kWh; rev. $332,725. (1910) [2]

ALGONA Mun. Utils., 104 W. Call St., 50511, 515/295-3584, Nicholas R. Scholer, supt.; 3,337 net.; gen. 15,000 kW coal, 12,500 kW gas (comb. turbine); 101,586,716 kWh; sales 98,123,894 kWh; rev. $3,990,055. (1898) [2]

ALTA Mun. Utils. 109 Prospect St., 51002, 712/284-1122, Ronald L. Deiber, supt.; 1,075 met.; gen. 1,250 kW oil-fired; pur. 11.3 million kWh; rev. $365,000. (1893) [1]

ALTA VISTA Elec. Dept., City Hall, 50603, 515/364-2975, Daniel White; 105 met.; no gen.; pur. 1.6 million kWh; rev. $44,342.

ALTON Mun. Light & Power, 905 3rd Ave, Drawer J, 51003, 712/756-4314, Curtis Punt, mgr.; 542 met.; no gen.; sales 6,998,877 kWh; rev. $279,781. (1968) [2]

AMES Mun. Elec. System, Municipal Bldg., 50010, 515/232-6210, Merlin C. Hove, dir.; 13,053 met.; gen. 81,000 kW, 60,000 kW steam, 20,000 kW gas turbine, 1,000 kW eng., 222 million kWh; pur. 16 million kWh; rev. $8,517,597. (1896)

ANITA Mun. Utils., 828 Main St., 50020, 712/762-3845, Edward J. Brownsberger Jr., supt.; 645 met.; gen. 747 kW (oil) eng.; sales 5,923,480 kWh; rev. $168,929. (1939) [2]

ANTHON, City of, 51004, 712/373-5218, Robert L. Kindig, supt.; 560 met.; no gen.; pur. 4,018,410 kWh; rev. $229,962. (1976) [2]

APLINGTON Mun. Light System, Box 308, 50604, 319/347-2425, Timothy Ubben, supt.; 488 met.; no gen. [2]

ATLANTIC Mun. Utils., 15 W. Third St., Box 517, 50022, 712/243-1395, Richard J. Stevens, supt.; 4,285 met.; gen. 30,150 kW, 17,500 kW coal, 8,500 kW gas or oil, 4,150 kW dual-fuel, gas/oil, 94,899,000 kWh; sales 114,425,312 kWh; rev. $3,975,219. (1908) [2]

AUBURN Mun. Util., Box 238, 51433, 712/688-2264, Warren Prefley, supt.; 184 met.; no gen.; sales 1,416,865 kWh, rev. $102,310. [2]

AURELIA Mun. Elec. Util., 235 Main St., 51005, 712/434-2025, Edmund Radke, chmn., bd. of trustees; 558 met.; no gen.; sales 5,607, 806 kWh; rev. $367,242. (1974) [2]

BANCROFT Mun. Utils., 108 N. Portland St., 50517, 515/885-2772, Walter Fangman, supt.; 600 met.; no gen.; pur. 9,295,814 kWh; rev. $508,881. (1939) [2]

BELLEVUE Mun. Utils., 900 N. Riverview, 52031, 319/872-3357, Ray Beschen, supt.; 1,322 met.; gen. 5,320 kW eng., 11.6 million kWh; pur. 1.7 million kWh; rev. $714,580. (1896) [1]

BLOOMFIELD Mun. Light Plant, 111 W. Franklin St., 52537, 515/664-2260, Larry Kilburn, pub. wks. dir.; 1,300 met.; gen. 7,100 kW dual-fuel, 1,500 kW diesel; 2,561,000 kWh; pur. 21,852,000 kWh; rev. $332,093. (1911) [2]

BREDA Elec. System, 51436, 712/673-2660, Lonnie Kropf, supt.; no gen.

BROOKLYN Mun. Elec. Plant, 207 Front St., 52211, 515/522-9292, Dale Hawkins, mgr.; 793 met.; gen. 2,424 kW eng., pur. 8,770,398 kWh; rev. $323,783. (1940) [2]

BUFFALO Mun. Distributing System, 52728, 319/381-2226, Mildred Niles, city admin.; Eldon L. Mosier, supt.; 420 met.; no gen.

BURT Mun. Elec. Util., 119 Walnut St., Box 128, 50522, 515/924-3360, Russell D. Reimers, supt.; 399 met.; no gen ; pur. 2,959,996 kWh; rev. $154,861. (1930) [2]

CALLENDER, City of, 415 Thomas St., 50523, 515/548-3859, Frank Schuster,;203 met.; no gen.; pur 1,762,000 kWh; rev. $97,317. (1965) [2]

CARLISLE Mun. Elec., Box 430, 50047, 515/989-3224, Fred Loudenslager, supt.; 1,307 met.; no gen.; pur. 11 million kWh; rev. $724,682. (1930) [1]

CASCADE Mun. Elec., 201 Pierce St., 52033, 319/852-3614, Fred A. Kremer, gen. mgr.; 862 met.; gen. 3,857 kW, 300 KW oil-eng., 3,557 kW dual-fuel, 72,500 kWh; sales 9,064,000 kWh; rev. $502,744. (1940) [2]

CEDAR FALLS Utils., 612 E. Twelfth St., 50613, 319/266-1761, Dean Crowe, gen. mgr.; 14,081 met.; gen. 108,000 kW, 83,000 kW coal, 25 kW gas turbine, 178,295,627 kWh; sales 263,602,762 kWh; rev. $12,968,676. (1913) [2]

COGGON Mun. Light Plant, 131 W. Main St., 52218, 319/435-2436, Robert L. Farley, supt.; 350 met.; gen. 1,740 kW oil-fired eng., 107,000 kWh; pur. 3,000,000 kWh; rev. $154,086. (1927) [2]

COON RAPIDS Mun. Utils., 123 3rd Ave., Box 207, 50058, 712/684-2225, Eugene P. Smith mgr.; 786 met.; gen. 3,000 kW coal, 1,088 kW oil (eng), 2,450 kW dual-fuel; sales 32,851,648 kWh; rev. $1,029,794. (1936) [2]

CORNING Mun. Utils., 501 Benton Ave., 50841, 515/322-3920, Dick G. Cook, mgr.; 1,163 met.; gen. 6,300 kW oil-fired eng., 54,400 kWh; pur. 13,943,308 kWh; rev. $447,104. (1936) [2]

CORWITH Elec. Dept., 50430, 515/583-2342, Tim Berhow, supt.; 230 met.; no gen.; pur. 2,166,800 kWh; rev. $1,117,646. [2]

DANVILLE Elec. Dept., Box 265, 52623, 319/392-4685, Joe A. Green, supt.; 411 met.; no gen. [2]

DAYTON Light & Power, 101 S. Main, 50530; 515/547-2711, Shirley B. Miller, city clerk; 471 met.; gen. 318 kW oil-fired eng; 1,065 kW dual-fuel eng; 15,400 kWh; pur. 4,667,919 kWh; rev. $227,627. [2]

DENISON Mun. Utils., Box 518, 51442, 712/263-4154, Daymon Abbott, gen. mgr.; 2,840 met.; gen. 1,360 kW dual-fuel; sales 90,484,613 kWh; rev. $2,094,277. (1914) [2]

DENVER City of Elec. Util., 117 N. State St., 50622, 319/984-5642, Larry Zars, city electrn., 686 met.; no gen.; pur. 8,007,600 kWh; rev. $377,130. [2]

DIKE, City of, Box 160, 50624, 319/989-2291, Donald Knudsen, mayor; 383 met.; no gen.; pur. 4,639,500 kWh; rev. $238,160. [2]

DURANT Mun. Elec. Plant, 601 Fourth St., Box 494, 52747, 319/785-6213, V. R. Crist, supt.; 763 met.; gen. 1,718 kW oil, 2,070 kW dual-fuel gas; 21,000 kWh; sales 9,564,633 kWh; rev. $511,686. (1942) [2]

DYSART Elec. Dept., 52224, Box 686, 319/476-5690, Jean Jacobsen, city clerk; no gen. [2]

EARLVILLE Light & Water System, Box 67, 52041, 319/923-3365, Vincent D. Herman, supt.; 356 met.; no gen. [2]

ELDRIDGE Mun. Elec., Box 350, 52748, 319/285-4841, Jean Schilling, city clerk; 1,100 met.; no gen.; rev. $250,000. (1900) [2]

ELLSWORTH Mun. Elec., 1551 DeWitt St., 50075, 515/836-4751, Raymond L. Anderson, supt.; 249 met.; no gen.; pur. 2,253,600 kWh; rev. $116,805. [2]

ESTHERVILLE Mun. Elec. Util., 4 North 7th, 51334, 712/362-7771, Steve Woodley, city admir.; 3,440 met.; gen. 16,250 kW, 3,450 kW oil-fired, 12,800 kW dual-fuel, 503,000 kWh; pur. 58.7 million kWh; rev. $2,630,537. (1894) [1]

FAIRBANK Elec. Co., Box 411, 50629, 319/635-2869, Ted Vorwald, supt.; 420 met.; no gen.; pur. 4,056,000 kWh; rev. $222,664. (1920) [2]

FARNHAMVILLE Elec. Dept., 50538, 712/462-3660, Dennis Jacobson, supt.; 200 met.; no gen.

FONDA Mun. Elec System, 50540, 712/288-6618, Jack Weintzetl, supt.; 400 met.; no gen.

FONTANELLE, Town of, 50846, 515/745-3961, Delmer D. Miller, supt.; 387 met.; no gen.; pur. 2.3 million kWh; rev. $67,813.

FOREST CITY Mun. Light Plant, 50436, 515/582-4343, Orlando Peterson, dist. supt., Willard Charlson, plant supt.; 1,370 met.; gen. 2,965 kW eng., 6.7 million kWh; pur. 1.5 million kWh; rev. $231,753.

FREDERICKSBURG Mun. Light Dept., Box 318, City Hall, 50630, 319/237-5725, Vernon Kerr. supt.; 549 met.; no gen.; rev. $895,368. [2]

GLIDDEN, City of, Box 349, 51443, 712/659-3010, Grace A. Thornton, city clerk; 569 met.; no gen.; pur. 6,414,014 kWh; rev. $194,152. (1919) [2]

GOWRIE Mun. Utils., Box 47, 1102 Main St., 50543, 515/352-3065, Donald G. Borgen, Supt.; 611 met.; gen. 3,600 kW oil (eng), 4,500 kWh, purchase 6,081,627 kWh; rev. $384,061. (1934) [2]

GRAETTINGER Mun. Light Plant, Box 178, 51342, 712/859-3844, Kenneth R. Jensen, supt.; 520 met.; gen. 11,000 kW diesel, 4,570 kWh; pur. 6,385,138 kWh; rev. $359,140. (1941) [2]

GRAFTON Elec. Dept., Box 27, 50440, 515/748-2981, Linda Bork, city clerk; no gen.; pur. 11,546,321 kwh; rev. $65,700. [2]

GRAND JUNCTION Mun. Light & Water, 305 So. Eleventh St., 50107, 515/738-2285, F. M. Dittert, supt.; 536 met.; gen. 560 kw oil-fired eng., 7,300 kWh; pur. 4,786,248 kWh; rev. $296,161. (1932) [2]

GREENFIELD Mun. Utils., 211 S. First St., Box 90, 50849, 515/743-2914, Robert Guikema, supt.; 1,060 met.; gen. 6,750 kW, 3,000 kW oil-fired, 3,750 kW dual-fuel; pur. 17,165,911 kWh; rev. 744,062 (1890) [2]

GRUNDY CENTER Mun. Light & Power, 506 Seventh St., 50638, 319/824-5208, Edward (Bob) Ayers, mgr.; 1,374 met.; gen. 5,750 kW eng., 45,300 kWh; pur. 21,496,000 kWh; rev. $1,177,846. (1941) [2]

GUTTENBERG, City of, Box D, 502 So. First St., 52052, 319/252-1161, Thomas Lebak, city mgr.; 1,144 met.; no gen. pur. 12,528,000 kWh; rev. $583,925. [2]

HARLAN Mun. Utils., Box 71, 51537, 712/755-5182, F. James Kalal, gen. mgr.; 2,673 met.; gen. 6,000 kW eng.; pur. 45,000,000 kWh; rev. (1909) [2]

HARTLEY Mun. Utils., 169 S. Central Ave., 51346, 712/728-2240, Dean E. Meyer, supt.; 922 met.; gen. 2,253 kW eng. 2,800,000 kWh; pur. 9.4 million kWh; rev. $464,477. (1908) [1]

HAWARDEN, City of, 700 Seventh St., 51023, 712/552-2565, Russell Harris, supt. pub. works; 1,537 met.; gen. 2,450 kW eng.; sales 17,350,372 kWh; rev. $704,441. (1894) [2]

HINTON Mun. Elec. System, Box 1023, 51024, 712/947-4129, William Farmer, supt.; 240 met.; no gen.; pur. 3,368,475 kWh; rev. $199,664. (1910) [2]

HOPKINTON Mun. Utils., Box 129, 52237, 319/926-2480, John W. Westrich, supt.; 393 met.; gen. 2,036 kW oil-fired eng.; 2,600 kWh; pur. 7,317,600 kWh; rev. $281,329. (1937) [2]

HUDSON Elec. Dept., Box 266, 50643, 319/988-3343, Edwin Andorf, supt.; 710 met.; no gen.; pur. 7.5 million kWh; rev. $278,342. (1910)

INDEPENDENCE Mun. Light Plant, 711 Seventh Ave., 50644, 319/334-3880, Gene Williamson, supt.; 3,571 met.; gen. 14,025 kW, 2,125 kW oil (eng.) 11,900 kW dual-fuel (eng.) 182,000 kWh; pur. 36,723,000 kWh; rev. $2,064,855. (1920) [2]

INDIANOLA Mun. Utils., 111 S. Buxton, 50125; 515/961-5710, Roger Wood, gen. mgr.; 4,585 met.; gen. 20,600 kW comb. turbine, 14,000 kW dual-fuel, 386,800 kWh; pur. 61,882,000 kWh; rev. $2,913,900. (1891) [2]

KELLEY Mun. Dist. System, Box 177, 50134, 515/769-2213, Cynthia L. Kaufman, city clerk; 121 met.; no gen.; pur. 921,000 kWh; rev. $46,063. [2]

KEOSAUQUA Light Plant, Box 216, 52565, 319/293-3406, Donald Carruthers, supt.; 715 met.; gen. 1,040 kW eng., 121,700 kWh; pur. 245,386 kWh; rev. $357,059. [2]

KIMBALLTON Mun. Light Plant, 51543, 712/773-3451, Norman Nordby, city clerk; 207 met.; gen. 400 kW eng.; pur. 2,207,026 kWh; rev. $84,691. [2]

LAKE MILLS Mun. Elec. Plant, 201 S. Mill St., 50450, 515/592-2441, Donald F. Wirt, dir. of util.; 1,058 met.; gen. 11,500 kW (oil) eng., 130,000 kWh; sales 17,181,270 kWh; rev. $949,888. (1937) [2]

LAKE PARK Mun. Utils., 209 So. Market, 51347, 712/832-3176, Merel Clark, supt.; 560 meg.; gen. 1,300 kW oil-fired eng., 4,300 kWh; pur. 6,985,100 kWh; rev. $260,684. (1947) [2]

LAKE VIEW, City of, 305 Main St., 51450, 712/657-2212, Eugene G. Meyers, dir. of oper., 1,126 met.; no gen.; pur. 14,350,790 kWh; rev. $420,386. [2]

LAMONI Mun. Utils., 111 S. Chestnut St., 50140, 515/784-6911, Robert A. Colyer, supt.; 1,231 met.; gen. 5,223 kW 1,190 kW oil, 4,033 kW dual-fuel (eng)., 93,900 kWh; sales 13,123,632 kWh; rev. $726,271. (1940) [2]

LA PORTE CITY Mun. Utils., 200 Main, 50651, 319/342-2053, Chuck Utley, supt., 1,347 met.; gen. 2,861 kW dual-fuel, 25,000 kWh; sales 11,081,635 kWh; rev. $529,809. (1935) [2]

LARCHWOOD Mun. Elec., 51241, 712/477-2929, C. B. Egge, supt.; 300 met.; no gen., 3.5 million kWh; rev. $135,500. [0]

LAURENS Mun. Light & Power Plant, 272 N. Third St., 50554, 712/845-4610, Lyle W. Hartwig, supt.; 850 met.; gen. 1,500 kW eng.; 3,000 kW coal; sales 12,585,000 kWh; rev. $998,635. (1949) [2]

LAWLER Elec. Dept., 52154, 515/238-3614, Paul V. Martin, city clerk; 278 met.; no gen.; pur. 2,635,200 kWh.; rev. $133,637. [2]

LEHIGH Elec. Dept., 50557, 515/359-2311, Franklin Boering, supt.; no gen.

LENOX Mun. Light & Power, Box 96, 50851, 515/333-2550, Leo H. (Barney) Miller, supt. of utils.; 776 met.; gen. 2,330 kW oil-fired; sales 10,372,258 kWh; rev. $290,768. (1931) [2]

LIVERMORE Lighting Dept., 50558, 515/379-1617, Noble Harris, supt.; 306 met.; no gen.; pur. 2 million kWh; rev. $60,000.

LONG GROVE Mun. Elec. Co., Box 210, 52756, 319/285-9743, David Vens, supt.; 181 met.; no gen.; pur. 2,022,000 kWh; rev. $110,639. [2]

MANILLA Mun. Service, 166 Sixty Ave., 51454, 712/654-3952, James H. Macumber, supt.; 525 met.; gen. 1,130 kW oil-fired eng., 1,200 kWh; pur. 7,200,000 kWh; rev. $264, 045. (1915) [2]

MANNING Mun. Light Plant, 719 Third St., 51455, 712/653-3214, Gerald Beck, mgr.; 883 met.; gen. 1,610 kW oil-fired eng., 1,070 kWh; pur. 16,471,835 kWh; rev. $727,061. (1937) [2]

MAPLETON Mun. Elec. Plant, Front St., 51034, 712/882-1411, Clifton C. Clark, mgr.; 852 met.; gen. 1,315 kW eng., pur. 5.4 million kWh; rev. $130,087.

MAQUOKETA Mun. Elec. System, 121 S. Olive St., 52060, 319/652-2484, Patrick Callahan, city mgr.; 2,446 met.; gen. 10,235 kW, 2,200 kW oil, 8,035 kW dual-fuel (eng)., 316,800 kWh; sales 29,480,668 kWh; rev. $1,610,464. (1919) [2]

MARATHON Light & Water Dept., Box 188, 50565, 712/289-2261, Robert Baker, elec. supt.; 265 met.; no gen.; pur. 2,203.200 kWh; rev. $120,922. (1916) [2]

McGREGOR Mun. Utils, 52157, 319/873-2258, Bob Henkes, chmn; bd. of trustees; 526 met.; gen. 2,013 kW eng., 53,550 kWh; pur. 6.6 million kWh; rev. $379,429. (1941) [0]

MILFORD Mun. Utils., 907 Eleventh St., 51351, 712/338-4376, Norman Parsons, mgr.; 1,051 met.; gen. 3,500 kW, 2,000 kW coal-fired steam, 1,500 kW dual-fuel, 900 kWh; pur. 15,922,000 kWh; rev. $728,542. (1935) [2]

MONTEZUMA Mun. Light & Power, 406 E. Washington, 50171, 515/623-5102, Don H. Fahlenkamp, supt.; 942 met.; gen. 6,438 kW, 2,188 kW oil, 4,250 kW dual-fuel (eng), 32,100 kWh; sales 11,839,228 kWh; rev. $689,220. (1939) [2]

MOUNT PLEASANT Utils., 509 N. Adams St., 52641, 319/385-2121, James Ritter, util. mgr.; 3,330 met.; gen. 10,500 kW coal, 1,500 kW diesel; pur. 2,768,227 kWh; rev. $35,897,845. (1897) [2]

MUSCATINE Power & Water, 3205 Cedar St., Box 899, 52761, 319/263-2631, Clyde L. Bowen, gen. mgr.; 9,975 met.; gen. 122,850 kW coal, 447,422,230 kWh; pur. 209,415,000 kWh; rev. $19,614,059. (1924) [2]

NEOLA Light & Water System, 51559, 712/485-2307, George Soppe, Mgr.; 310 met.; no gen.

NEW HAMPTON Mun. Light Plant, 921 Canty Ave., 50659, 515/394-3002, Robert K. Kamrath, supt.; 1,873 met.; gen. 16,020 kW eng., 447,700 kWh; pur. 42,630,316 kWh; rev. $1,995,244. (1903) [2]

NEW LONDON Mun. Light & Power Dept., 120 W. Main St., 52645, 319/367-5623, Merle Steward, mgr.; 1,150 met.; no gen.; pur. 10 million kWh; rev. $408,000. (1909)

OGDEN Mun. Utils., Box 70, 50212, 515/275-2437, Harold Hammarstedt, supt.; 1,027 met.; gen. 3,980 kW dual-fuel, 49,600 kWh; sales 8,858,623 kWh; rev. $520,108. (1936) [2]

ONAWA Mun. Light Plant, 1035 8th St., 51040, 712/423-1511, Everett Sorenson, supt. utils.; 1,572 met.; gen. 3,110 kW eng.; pur. 21,801,314 kWh; rev. $1,032,796. (1894) [2]

ORANGE CITY Mun., 125 Central Ave., S. E., 51041, 712/737-4885, Allen Roos, mgr.; 2,180 met.; gen. 3,625 kW eng.; pur. 36.2 million kWh; rev. $1,155,705. (1921) [0]

ORIENT Mun. Utils., Box 116, 50858, 515/337-5711, Martin Wagner, supt.; 220 met.; no gen. [2]

OSAGE Mun. Utils., 720 Chestnut St., Box 207, 50461, 515/732-3731, Weston D. Birdsall, gen. mgr.; 2,032 met.; gen. 11,200 kW dual-fuel, 500 kW oil, 623,300 kWh; sales 20,504,623 kWh; rev. $1,160,855. (1941) [2]

PANORA Mun. Util. Elec., 102 N. W. 2nd, City Hall, 50216, 515/755-2164, V. L. Schieffer Jr., elec. supt.; 710 met.; no gen.; pur. 6 million kWh; rev. $350,000. (1921) [1]

PATON Mun. Elec. Dept., 50217, 515/968-4271, Arthur Subbert, supt.; 167 met.; no gen.

PAULLINA Mun. Utils., 127 S. Main, 51046, 712/448-3428, Robert J. Alborn, admin.; 685 met.; gen. 1,540 kW eng.; pur. 7,508,325 kWh; rev. $278,714. (1919) [2]

PELLA Mun. Power & Light, 717 Main St., 50219. 515/628-2581, James A. Wisse, supt. of elec. oper.; 3,796 met.; gen. 38,000 kW coal-fired eng., 91,546,860 kWh; pur. 1,693,000 kWh; rev. $4,480,529. (1909) [2]

POCAHONTAS, City of, 14 Second Ave., N. W., 50574, 712/335-4841, Duane Armstead, Supt. of Pub. Wks.; 1,175 met.; no gen.; pur. 14,232,000 kWh; rev. $620,434. (1912) [2]

PRESTON Mun. Light & Power, Box 37, 52069, 319/689-3081, Gary Driscoll, plant supt.; 512 met.; gen. 4,257 kW eng., 182,600 kWh; pur. 8.6 million kWh; rev. $400,684. (1939) [0]

PRIMGHAR Mun., Box 39, 51245, 712/757-2435, Robert Mulder, supt.; 553 met.; gen. 1,550 kW (oil) eng.; sales 5,344,336 kWh; rev. $270,996. (1939) [2]

READLYN Mun. Elec. Dept., Box 70, 50668, 319/279-3411, Sharon Davis, city clerk; 367 met.; no gen.; sales 3,244,862 kWh; rev. $183,796. [2]

REMSEN Mun. Utils., 205 Fulton St., 51050, 712/786-2136, Louis A.

Huewe, supt.; 767 met.; gen. 1,440 kW dual-fuel eng.; pur. 10,295,880 kWh; rev. $331,279. (1933) 2

RENWICK Mun. Light & Power Plant, Box 174, 50577, 515/824-3511, Galen Engstrom, supt.; 209 met.; gen. 483 kW diesel; pur. 2,792,082 kWh; rev. $149,341. (1928) 2

ROCKFORD Mun. Light Plant, 18 First St., So., 50468, 515/756-2215, Richard Graham, Supvr.; 480 met.; gen. 1,865 kW internal combustion and gas turbine; 5,620 kWh; pur. 4,317,000 kWh; rev. $268,767. (1935) 2

ROCK RAPIDS Utils., 301 S. Third Ave., 51246, 712/472-2511, William G. Tobin, mgr.; 1,365 met.; gen. 2,500 kW oil-fired, eng., 17,520 kWh; sales 19,455,780 kWh; rev. $761,121. (1896) 2

ROLAND Mun. Elec., Box 288, 50236, 515/388-4638, Bill Hinds, supt.; 482 met.; no gen.; rev. $295,102. (1911) 1

SABULA, City of, Box 331, 52070, 319/687-2420, L. Gifford, clerk; 362 met.; no gen.; pur. 2,779,000 kWh; rev. $99,269. (1965) 2

SANBORN Mun. Light Plant, 102 Main St., 51248, 712/729-3974, Allen Bonderman, gen. mgr.; 672 met.; gen. 1,440 kW eng.; sales 10,713,038 kWh; rev. $368,640. (1947) 2

SERGEANT BLUFF Mun. Light & Power, 51054, 712/943-4244, Luke Dellwo, supt. of pub. wks.; no gen.

SEYMOUR Mun. Utils., Box 54, 52590, 515/898-7146, Pat Stief, supt.; 516 met.; no gen.; sales 4,431,097 kWh; rev. $257,246. 2

SHELBY Mun. Elec. Util., Box 186, 51570, 712/544-2402, Lawrence Brown, supt.; 342 met.; no gen.; sales 4,591,998 kWh; rev. $137,248. 2

SIBLEY Mun. Utils., 1108 Third Ave., 51249, 712/754-3454, Byron Lopau, supt.; 1,847 met.; no gen.; sales 26,799,960 kWh; rev. $1,003,308. (1915) 2

SIOUX CENTER Mun. Utils, 337 N. Main Ave., 51250, 712/722-0761, Harold Schiebout, util. supt.; 1,703 met.; gen. 1,465 kW oil, 20,400 kWh; sales 29,084,696 kWh; rev. $1,031,946. (1949) 2

SPENCER Mun. Utils., Box 110, 51301, 712/262-3027, Neal Drefke, gen. mgr.; 5,254 met.; gen. 30,890 kW, 23,600 kW combustion turbine (oil), 7,290 kW coal (steam turbine), 40,077,439 kWh; sales 122,562,311 kWh; rev. $4,299,543. (1901) 2

STANHOPE Elec. Util., 50246, 515/826-3290, Edward Haman, supt.; 269 met.; no gen.; pur. 2,303,100 kWh; rev. $131,000. 2

STANTON Elec. Dist. System, Box 80, 51573, 712/829-2613, Larry Johnson, supt.; 313 met.; no gen.; pur. 5,829,060 kWh; rev. $139,025. (1937) 2

STATE CENTER Mun. Light & Power, Box 668, 50247, 515/483-2590, Charles Utley, supt.; 867 met.; gen. 5,634 kW dual-fuel, 177,300 kWh; pur. 11.3 million kWh: rev. $550,015. (1899) 1

STORY CITY Mun. Elec. Util., 504 Broad St., 50248, 515/733-4691, Gene R. Twedt, supt.; 1,434 met.; gen. 704 kW oil-fired, 8,316 kW dual-fuel, 308,100 kWh; pur. 20.4 million kWh; rev. $981,279. (1904) 1

STRATFORD Light & Power, Box 218, 50249, 515/838-2311, Geraldine Conklin, city clerk; 395 met.; no gen.; pur. 3,761,560 kWh; rev. $186,227. (1920) 2

STRAWBERRY POINT Mun. Light Plant, Box 279, 52076, 319/933-4482, Ewald Maker, supt.; 704 met.; gen. 2,467 kW diesel, 129,000 kWh; pur. 6.284,690 kWh; rev. $347,357. 2

STUART Mun. Util., Box 370, 50250, 515/523-2915, William Gilliam, supt.; 881 met.; gen. 3,545 kW, 90,800 kWh; sales 7,935,268 kWh; rev. $455,009. (1891) 2

SUMNER Mun. Light Plant, 105 Wapsie, 50674, 319/578-5611, Robert Jergens, supt,; 1,097 met,; gen. 1,600 kW oil, 3,700 kW dual-fuel eng.; pur. 13,000,000 kWh; rev. $738,097. (1935) 2

TENNANT Elec. Dept., 51574, 712/744-3483, Tom Hansen, mayor; no gen.

TIPTON City of, 407 Lynn St., 52772, 319/886-6187, Robert E. Snavely, City Coord.; 1,654 met.; gen. 600 kW oil-fired, 2,000 kW dual-fuel,; 29,800 kWh; sales 17,020,000 kWh; rev. $963,620. (1916) 2

TRAER Mun. Utils., 649 Second St., 50675, 319/478-8760, Wilson A. Briggs, supt.; 1,070 met.; gen. 4,312 kW dual-fuel, 420 kW diesel,; 317,000 kWh; pur. 12,249,600 kWh; rev. $712,000. (1917) 2

VILLISCA Mun. Power Plant, 129 W. Fifth St., 50864, 712/826-2282, Kenneth D. Higgins, supt.; 970 met.; gen. 2,046 kW oil-fired, eng.; pur. 9,045,892 kWh; rev. $216,501. (1936) 2

VINTON Mun. Elec., Second Ave. and Second St., 52349, 319/472-3663, Marvill K. Mostrom, supt.; 2,386 met.; gen. 13,235 kW dual-fuel, 2,265 kW oil-fired, 515,300 kWh; pur. 28,692,000 kWh; rev. $1,547,638. (est. 1913) 2

WALL LAKE Elec. Dept., 51466, 712/664-2216, Virtus Pittman; 350 met.; no gen.; pur. 7,488,432 kWh; rev. $130,271. (1903) 2

WAVERLY Mun. Elec. Util., 1500 W. Bremer Ave., 50677, 319/352-6251, H. G. Thayer, dir.; 3,740 met.; gen. 16,609 kW, 2,600 kW oil-fired, 13,595 kW dual-fuel, 495 kW hydro, 3,097,600 kWh; pur. 69,397,000 kWh; rev. $3,640,848. (1904) 2

WEBSTER CITY, City of, Mun. Elec., 400 Superior St., 50595, 515/832-4271, Bob Goretska, supt., 4,217 met.; gen. 15,000 kW coal, 20,000 kW gas turbine, sales 71,985,867 kWh; rev. $3,668,332. (1890) 2

WEST BEND Mun. Power Plant, 10 N. Broadway, Box 411, 50597, 515/887-3111; James E. Schuller, supt.; 652 met.; gen. 375 kW oil, 4,372 kW dual-fuel (eng.); 515,500 kWh; sales 9,595,500 kWh; rev. $532,546. (1915) 2

WESTFIELD Elec. Dept., 51062, Box 5, 712/568-2631, Ronnie Burke, city clerk; 88 met.; no gen. pur. 960,000 kWh, rev. $42,000. 2

WEST LIBERTY Mun. Elec. Util., W. 2nd St., 52776, 319/627-2418, LeRoy Praiezk, supt.; 1,107 met.; gen. 6,300 kW, 800 kW oil-fired eng., 5,500 kW dual-fuel eng.; pur. 34,500,000 kWh; rev. $1,530,000. (1900) 2

WEST POINT Mun. Lighting Dept., 52656, 319/837-6313, Richard Pietz, supt.; 607 met.; no gen.; rev. $322,449. 1

WHITTEMORE Mun. Power Plant, Box 116, 50598, 515/884-2631, Dean Zoet, supt.; 238 met.; gen. 2,203 kW internal combustion, 198,274 kWh; pur. 4,558,176 kWh; rev. $198,274. 2

WILTON Mun. Light & Power, 220 W. Third St., 52778, 319/732-2929, Rick J. Cayton, supt.; 1,188 met.; gen. 4,335 kW, sales 14,561,078 kWh; rev. $727,797. (1891) 2

WINTERSET Mun. Utils., 321 N. First St., 50273, 515/462-2152, George C. Berry, supt.; 2,061 met.; gen. 8,400 kW, 750 kW oil-fired eng., 7,730 kW dual-fuel eng., 1,000 kWh; pur. 23,587,704 kWh; rev. $1,078,206. (1895) 2

WOODBINE Mun. Light and Power, 517 Walker St., 51579, 712/647-2340, Bruce Walters, supt.; 1,040 met.; gen. 1,580 kW eng., 63,475 kWh; pur. 9 million kWh; rev. $274,869. 1

WOOLSTOCK Elec. Dept., 50599, Box 57, 515/839-5531, Hazel Brock, city clerk; 120 met.; no gen. 2

KANSAS

ALMA, City of, 326 Missouri, 66401, 913/765–3922; Max Kraus, supt., light plant; 482 met.; no gen.; pur. 4.8 million kWh; rev. $309,682. (1905) 2

ALTAMOUNT, City of, Box 305, 67330, 316/784-5503, Charles Arb, supt.; 477 met.; no gen.; pur. 5.7 million kWh; rev. $193,301. (1934)

ANTHONY, City of, Box 504, 67003, 316/842-5960, Jack C. Scott, supt. of utils.; 1,941 met.; gen. 12,000 kW, 3,357,600 kWh; rev. $1,203,779. (1937) 2

ARCADIA Mun. Elec. Dept., Box 126, 66711, 316/638-4310, Bill Morris, supt.; 223 met.; no gen.; pur. 1.3 million kWh; rev. $34,333.

ARMA, City of, 701 E. Washington, Box 829, 66712, 316/347-4125, James C. Jones, util. supt., 758 met.; no gen.; pur. 7,781,400 kWh; rev. $397,249. 2

ASHLAND, City of, Box 547, 67831, 316/635-2531, Donald R. German, city supt.; 702 met.; gen. 8,200,800 kWh; sales 7,614,415 kWh; rev. $455,888. 2

ATTICA, City of, 101 N. Main, 67009, 316/254-7216, Donald Bateman, gen. supt.; 450 met.; gen. 2,360 kW, 509,300 kWh; pur. 4.1 million kWh, rev. $229,134. 0

AUGUSTA, City of, Mun. Elec. Dept., Box 489, 67010, 316/775-2391, James W. Rawlings, supt. elec. gen.; 3,138 met.; gen. 1,106 kW oil-fired, 22,636 kW dual-fuel, 38,439,800 kWh; sales 40,617,691 kWh; rev. $2,166,795. (1911) 2

AXTELL, City of, 401 Maple, 66403, Clair Hill; 235 met.; no gen.; pur. 1,776,400 kWh; rev. $98,852. 2

BALDWIN CITY Mun. Light & Water Dept., 316 Elm, 66006, 913/594-6427, William Randell, supt.; 1,062 met.; gen. 6,112 kW eng., 10 million kWh; pur. none; rev. $391,000. 1

BELLEVILLE, City of, Box 280, 66935, 913/527-2288, 1,619 met.; gen. 13,125 kW dual-fuel, 19,229,60 kWh; pur. none; rev. $1,132,004. (1923) 2

BELOIT Mun. Power, 215 S. Chestnut, 67420, 913/738-5121, Daniel Moellenberndt, city admr.; 2,067 met.; gen. 19,900 kW eng., 36.3 million kWh; pur. 30,200 kWh; rev. $343,037. (1951) 0

BLUE MOUND Mun. Dist. System, 66010, Lloyd Spillman, supt. light plant; 190 met.; no gen.; pur. 1.3 million kWh; rev. $63,580.

BRONSON Mun. Light & Power, 66716, 316/939-4578, Harold Johnson, supt.; 210 met.; no gen.; pur. 1.2 million kWh; rev. $22,800. (1926) 1

BURLINGAME Power & Light Dept., 101 E. Santa Fe, 66413, 913/654-3922, Norman Bloomquist, supt., 645 met.; gen. 4,630 gas and diesel internal comb., 5,178,329 kWh; rev. $398,507. (1902) 2

BURLINGTON Mun. Light & Power Dept., 301 Neosho St., 66413, 316/364-5575, Alfred Mann, elec. supt., 1,500 met.; gen. 3,620 kW tri-fuel, 767,620 kWh; pur. 19,088,000 kWh; rev.$1,220,700. (1935) 2

CAWKER CITY, City of Mun. Light & Water Dept., 804 Locust St., 67430, 913/781-4713, Donald Kincheloe, util. supt.; 433 met.; no gen.; pur. 3,673,600 kWh; rev. $222,766. (1913) 2

CENTRALIA Mun. Light System, 66415, 913/857-3764, Paul Elliott, elec. supt.; 262 met.; no gen.; pur. 2.3 million kWh; rev. $121,623.

CHANUTE, City of, Box 907, 66720, 316/431-9306, Ronald Reed, dir. elec. utils., 6,567 met.; gen. 22,250 kW, 16,500 kW steam, 1,750 kW oil, 4,000 kW dual-fuel, 65,689,850 kWh; pur. 23,509,300 kWh; rev. $4,053,350. (1903) 2

CHAPMAN, City of, Box 321, 67431, James Murrison, lt. and water supt.; 565 met.; no gen. 2

CHETOPA, City of, Box 203, 67336, 316/236-7511, Lloyd T. McGill, city supvr.; 730 met.; no gen.; pur. 10.1 million kWh; rev. $353,000. 1

CIMARRON, City of, Box 467, 67835, 316/855-2322, Vernon Hanna, city supt.; 792 met.; no gen.; pur. 11,244,800 kWh; rev. $752,462. 2

CLAY CENTER, City of, Elec. & Water Dept., 427 Court St., Box 117, 67432, 913/632-2137, D. D. Dierking, supt. of util.; 2,936 met.; gen. 17,900 kW, 9,500 kW gas (steam turbine), 8,095 kW dual-fuel eng., 25,063,300 kWh; pur. 12,873,600 kWh; rev. $1,872,883. (1907) 2

COATS Elec. Dept., 67028, Larry Flory, supt., water & light plant; no gen.

COFFEYVILLE Mun. Light & Power, 605 Santa Fe, Box 498, 67337, 316/251-7000, ext. 39, Ray Neale, city mgr.; 8,511 met.; gen. 80,050 kW steam, 98,768,900 kWh; pur. 67,721,600 kWh; rev. $9,177,369. (1901) 2

COLBY, City of, 585 N. Franklin, 67701, 913/462-3973, Jack Heaton, city mgr.; 2,605 met.; gen. 18,170 kW dual-fuel, 21,719,900 kWh; pur. 15,314,700 kWh; rev. $1,988,069. (1910) 2

DeSOTO, City of, 108 W. Second St., Box C, 66018, 913/585-1182, Garry Rudler, dir., pub. wks., 743 met.; no gen.; pur. 8,374,400 kWh; rev. $558,718. 2

DIGHTON Mun. Light & Water Dept., 147 E. Long St., 67839, 316/397-5541, Harry Smith, utils. supt.; 800 met.; no gen.; pur. 8,455,304 kWh; rev. $532,883. 2

ELLINWOOD Elec. Util. Dept., 201 W. 1st St., 67526, 316/564-2211; John Rapp, supt.; 1,303 met.; gen. 8,479 kW eng.; 3,571,100 kWh; sales 11,967,651 kWh; rev. $812,960. 2

ELLIS Mun. Elec. & Water System, W. 6th St., Box 24, 67637, 913/726-4741, Joe Roller, city supt.; 962 met.; gen. 6,085 kW eng., 9.2 million kWh; pur. none; rev. $566,800. (1915) 1

ELWOOD, City of, 6th & Kentucky, 66024, 913/365-6871, Paul Rounds, city admin.; 453 met.; no gen.; pur. 5,194,000 kWh; rev. $299,664. 2

ENTERPRISE Mun. Lighting System, 67441, 913/934-2323, G. W. (Jude) Saip Jr., city supt.; 380 met.; no gen.; rev. $97,404.

ERIE Mun. Light & Power, 224 S. Main, Box 196, 66733, 316/244-3488, Charles Clines, power plant supt.; 725 met.; no gen.; pur. 7,828,000 kWh; rev. $488,527. (1915) 2

EUDORA Mun. Elec. Dept., Seventh and Main, 66025, 913/542-2095, John Pinnick, supt.; 1,033 met.; no gen.; pur. 10.8 million kWh; rev. $566,800. 1

FREDONIA Mun. Power Plant, 314 N. Seventh St., 66736, 316/378-2404, Pat Flynn, util. supt.; 1,500 met.; gen. 7,200 kW dual-fuel eng.; 2,108,300 kWh; pur. 33,628,000 kWh; rev. $1,346,703. (1901) 2

GALVA Elec. Dept., Box 223, 67443, 316/654-2173, Donna Ladd, city clerk; 340 met.; no gen.; pur. 2.8 million kWh; rev. $144,930. 1

GARDEN CITY Mun., Box 499, 67846, 316/276-8263, Deane P. Wiley, city mgr.; 7,614 met.; no gen.; pur. 114,417,460 kWh; rev. $6,339,850. 2

GARDNER Mun. Elec. System, 112 S. Elma St., 66030, 913/884-7535, Richard McNett, supt.; 1,015 met.; no gen.; pur. 16,978,500 kWh; rev. $1,121,680. 2

GARNETT, City of, 131 W. Fifth, 913/448-5496, R. G. Doran, city mgr.; 1,839 met.; gen. 7,030 kW eng., 9.4 million kWh; pur. 10.1 million kWh; rev. $909,013. (1918) 0

GIRARD Mun. Light & Water Plant, 100 S. Ozard, 66743, 316/724-8918, William Larner Sr., supt. of prod.; 1,532 met.; gen. 7,735 kW eng.; pur. 21 million kWh; rev. $839,933.

GLASCO, City of, 67445, 913/568-2705, W. LeRoy Wolf, util. supt.; 450 met.; no gen.; pur. 3.6 million kWh; rev. $221,349. 2

GLEN ELDER, City of, Box 55, 101 S. Market St., 67446, 913/545-3322, Geneva Winkel, city clerk; 316 met.; no gen.; pur. 2,926,176 kWh; rev. $209,821. 2

GOFF Elec. Dept., 66428, 913/939-2770, Larry Hicks, mayor; 110 met.; no gen.; pur. 592,000 kWh; rev. $24,647. 0

GOODLAND Mun. Power Plant, 17th and Cherry, 67735, 913/899-5200, Pete Walker, plant supt.; 2,500 met.; gen. 21,000 kW, 770 kW oil fired eng., 20,230 dual-fuel eng., 40,121,900 kWh, pur. none; rev. $2,071,556. (1937) 2

GREENSBURG Light Plant, 400 N. Main, 67054, 316/723-2691, Melvin Simmons, supt.; 1,040 met.; gen. 7,062 kW dual-fuel eng., 11,640,100 kWh; pur. none; rev. $800,189. (1911) 2

HAVEN Light & Water Power Plant, 67543, Clifford Van Buren, supt., elec. plant; 536 met.; no gen.; pur. 8.6 million kWh; rev. $218,815

HERINGTON Mun. Water & Elec. Dept., 715 S. Broadway, 67449, 913/258-2271, W. A. Wetmore, city mgr.; 1,557 met.; gen. 9,700 kW eng., 20.1 million kWh; pur. 48,166 kWh; rev. $841,121. (1888) 1

HERNDON Mun., 67739, 913/322-5341, Ronald Beims, Mayor; 152 met.; no gen.; pur. 1,174,000 kWh; rev. $94,307. (1937) 2

HILL CITY Mun. Power Plant, 205 South Pomeroy, 67642, 913/674-5613, Milford Shelton, supt., power plant; 1,020 met.; gen. 7,265 kW eng., 13.5 million kWh; pur. none; rev. $765,347. 0

HILLSBORO, City of, 116 E. Grand, 67063, 316/947-3162, R. James, Supt.; 1,355 met.; no gen.; pur. 13,975,200 kWh; rev. $741,567. (1930) 2

HOISINGTON Mun. Elec. Util., Box 418, 67544, 316/653-4125, Harold Tarlton, city mgr.; 1,869 met.; gen. 15,980 kW, 200 kW oil-fired, 15,780 kW dual-fuel, pur. 17,632,500 kWh; rev. $1,171,425. (1940) 2

HOLTON Mun. Light, Water & Power, 66436, Eugene Williams, city mgr.; 1,844 met.; gen. 14,600 kW eng., 16.6 million kWh; pur. 4.2 million kWh; rev. $925,067.

HOLYROOD Light & Water Dept., 110 S. Main, 67450, Tom Randolph, 913/252-3652, supt.; 330 met.; no gen.; pur. 2.5 million kWh; rev. $183,774 (1918) 2

HORTON Water and Elec., E. Fifteenth St., 66349, 913/486-3911, Cleo N. Coffman, supt.; 1,033 met.; gen. 5,865 kWh eng., 1,583,200 kWh; pur. 7,587,200 kWh; rev. $582,089. (1912) 2

HUGOTON City Water & Light Dept., 114 E. Fifth St., Box 788, 67951, 316/544-8531, Everett Rowden, supt.; 1,679 met.; gen. 13,470 kW eng., 20.3 million kWh; pur. none; rev. $1,077,520. (1919) 1

IOLA, City of, Box 308, 66749, 316/365-2771, J. A. Wilson, supt. of pub. utils.; 4,169 met.; gen. 23,750 kW, 10,000 kW gas, 13,750 kW eng. (oil), 8,500,000 kWh; sales 54,584,158 kWh; rev. $2,134,384. (1900) 2

ISABEL City Elec. Dept., Box 97, City Hall, 67065, 316/739-4347, Carolyn Armstrong, city clerk; 80 met.; no gen.; pur. 827,600 kWh; rev. $38,226. 2

IUKA, City of, Box 205, 67066, 316/546-2532, Warren Taylor, mayor; 124 met.; no gen; pur. 1.6 million kWh; rev. $111,361. 2

JETMORE, City of, Public Municipality, Box 8, 67854, 316/357-8344, Dean Hertel, supt., 580 met.; no gen. 2

JOHNSON Mun. Power Plant, Main St., Box 500, 67855, 316/492-2322, Rex McGowne, supt.; 649 met.; gen. 4,250 kW dual-fuel eng., 10,787,600 kWh; pur. 1,136,300 kWh. (1938) 2

KANSAS CITY Bd. of Pub. Utils., 700 Minnesota Ave., 66101, 913/281-8100, Melvin C. Heuer, mgr. of prod. and dist.; 71,339 met.; gen. 822,000 kW, 601,000 kW coal, 90,000 kW gas/turbine (steam), 116,000 kW oil, 15,000 kW gas (comb. turbine), 1,918,089,400 kWh; sales 1,903,467,721 kWh; rev. $102,019,613. (1929) 2

KINGMAN Water and Light Dept., Box 168, 67068, 316/532-3111, Ben M. Payton, supt.; 1,800 met.; gen. 14,000 kW dual-fuel, 3,900,000 kWh; pur. none; rev. $1,650,000. (1913) 2

KIOWA 67070, 316/825-4127, Bill

Terwort, city mgr.; 800 met.; no gen.; pur. 10.1 million kWh; rev. $652,500. (1976) 2

LA CROSSE, City of, 1119 Main, 67548, 913/222-2511, Dudley Schutte, city mgr.; 908 met.; gen. 9,670,100 kW dual-fuel, 9,670,100 kWh; pur. 366,000 kWh; rev. $729,868. (1906) 2

LA HARPE Water & Light Dept., Box 121, 66751, 316/496-2241, George Poffenbarger, supt., 289 met.; no gen.; pur. 1,538,247 kWh; rev. $92,669. 2

LAKIN Elec. Dept., Box 148, 67860, 316/355-6252, John Speer, city supt.; 933 met.; no gen.; pur. 9,727,200 kWh; rev. $679,234. (1915) 2

LARNED, City of, Elec. Dept., Box 70, 67550, 316/285-2655, Ron Arnold, util. supt.; 2,587 met.; gen. 20,460 kW, 12,760 kW gas, 6,450 kW dual-fuel, 1,250 kW gas turbine, 17,544,597 kWh; sales 34,033,925 kWh; rev. $1,767,992. (1916) 2

LINCOLN Light Dept., 67455, 913/524-4280, Dan Smith, supt.; 954 met.; gen. 5,300 kW eng., 10.8 million kWh; pur. none; rev. $274,870.

LIN[illegible]BORG Water & Light. Box 70, [illegible]456, 913/227-2421, Carrol W. Webber, Power Plant Supt.; 1,306 met.; gen. 6,000 kW dual-fuel eng.; 5,342,890 kWh; sales 14,615,557 kWh; rev. $1,092,348. 2

LUCAS Mun. Elec. System, Box 308, 67648, Gary Ward, supt.; 320 met., no gen.; pur. 2.8 million kWh; rev. $150,000. 2

LURAY, City of, Box 158, 67649, 913/698-2302, Zola M. Houghton, city clerk; 178 met.; no gen.; pur. 1,553,600 kWh; rev. $86,365. 2

MAHASKA City Elec. Dept., 66955, Wayne Graham, supt.; 74 met.; no gen.; pur. 483,000 kWh; rev. $21,565.

MANKATO, City of, Elec. util., 210 N. Commercial, 66956, 913/378-3141, D. L. Hamilton, city admin.; 748 met.; no gen.; sales 6,347,795 kWh; rev. $431,429. (1950) 2

MARION, City of, 203 N. Third, 66601, 316/382-3703, Junior Bredemeier, city supt.; 1,089 met.; no gen.; pur. 11,791,200 kWh; rev. $611,330. 2

McPHERSON Bd. of Pub. Utils., 400 E. Kansas, 67460, 316/241-0661, Donald E. Gerard, gen. mgr.; 6,696 met.; gen. 218,000 kW, 48,000 kW gas, 170,000 kW gas turbine, 30,290,000 kWh; sales 302,212,556 kWh; rev. $9,870,264. (1909) 2

MEADE, City of, 132 S. Fowler, 67864, 316/873-2091, Douglas Fisher, city mgr.; 1,385 met; gen. 10,000 kW dual-fuel eng., 13,500,000 kWh; pur. 1,500,000 kWh; rev. $727,787. (1918) 2

MINNEAPOLIS Mun. Light, Water & Power Dept., 218 N. Rock St., 67467, 913/392-3137, Leo Baker, supt.; 990 met.; gen. 7,400 kW dual-fuel, 2,541,100 kWh; pur. 9,072,000 kWh; rev. $720,104. 2

MONTEZUMA, City of, Box 37, 67867, 316/846-2264, Dwight Watson, city supt.; 436 met.; no gen.; pur. 5,841,600 kWh; rev. $335,812. (1921) 2

MORAN, City of, Box 396, 66755, 316/237-4301, James Cole, supt.; 370 met.; no gen.; pur. 3.7 million kWh; rev. $150,706. (1900) 6

MORRILL, City of, Box 146, 66515, 913/459-2231, Dale Gaston, util. supt., 179 met.; no gen.; pur. 1,153,800 kWh; rev. $8,061. (1927) 2

MOUNDRIDGE, City of, 216 S. Christian, 67107, 316/345-2661, Elmer Goering, city admin., 694 met.; no gen.; pur. 10,483,000 kWh; rev. $464,656. (1909) 2

MOUNT HOPE Mun. Elec., Box 56, 67108, Chris Rasmussen, city engr.; 324 met.; no gen.; pur. 4,012,000 kWh; rev. $208,204. 2

MULBERRY Mun. Light Plant, 66756, 316/764-3815, Frank Tersina, supt.; 333 met.; no gen.; 1.3 million kWh; rev. $100,000. (1915) 2

MULVANE, City of, 211 N. 2nd St., 67110, 316/777-4491, Gary Rambo, supt.; 1,772 met.; gen. 5,837 kW dual-fuel eng., 415 kW oil, sales 20,310,393, rev. $1,100,904. 2

MUSCOTAH Mun. Elec.Dept., 66058, Ralph Bushey, supt.; gen. 7,235 kW eng., 10.7 million kWh; pur. none; rev. $253,812.

NEODESHA Mun. Power Plant, West Main St., 66757, 316/325-2925, Toby Kemper, supt., power plant; 1,610 met.; gen. 8,150 kW dual-fuel eng., 11,554,700 kWh; pur. 15,720,100 kWh; rev. $1,277,609. 2

NETAWAKA Elec. Light System, 66515, Kenneth Keithline, city clerk; 84 met.; no gen.; pur. 660,600 kWh; rev. $27,265.

NORTON Mun. Light & Water Plant, 301 E. Washington, 67654, 913/877-3355, Dennis McMullen, city supt.; 1,818 met.; gen. 11,000 kW eng., 21.2 million kWh; pur. none; rev. $837,000. 1

OAKLEY, City of, Mun. Light Plant, 400 Price St., Box 116, 67748, 913/672-4558, Frank D. Salisbury, city supt.; 1,393 met.; gen. 8,346 kW, 415 kW oil-fired eng., 7,931 kW dual-fuel eng., 14,245,500 kWh; pur. 3,177,300 kWh; rev. $930,594. (1913) 2

OBERLIN Elec. Dept., 67749, 913/475-2933, Phyll Cramer, city supt.; 1,100 met.; gen. 7,175 kW eng., 14.9 million kWh; pur. none; rev. $646,721.

OSAGE CITY Mun. Light Plant, Fifth and Main Sts., 66523, 913/528-1851; Elaine Needham, city admin.; 1,523 met.; gen. 7,155 kW eng., 15.2 million kWh; pur. none; rev. $730,000. 1

OSAWATOMIE, City of, Box 37, 66064, 913/755-4138, Bill J. Kellum, dir. of utils.; 2,104 met.; gen. 6,800 kW dual-fuel, 1,866,040 kWh; pur. 18,383,167 kWh; rev. $1,113,664. 2

OSBORNE, City of, 133 W. Main St.; 67473, 913/346-5611, Robert Clark, plant supt.; 1,110 met.; gen. 6,840 kW dual-fuel, 10,492,600 kWh; pur. 2,340,000 kWh; rev. $840,291. 2

OTTAWA, City of, Util. Dept., Fourth and Walnut, 66067-2299, 913/242-2190, Jack E. Davis, dir. utils.; 5,184 met.; gen. 34,750 kW, 4,000 kW oil & gas, 19,250 kW dual-fuel, 11,500 kW comb. cycle, 58.2 million kWh; pur. 19.6 million kWh; rev. $4,009,549. (1906) 1

OXFORD Mun. Elec. Dept., Box 337, 67119, 316/455-2223, T. L. O'Hearn, supt.; 612 met.; no gen.; pur. 7,557,600 kWh; rev. $347,794. 2

POMONA City Light Dept., Box 67, 66076, 913/566-3522, Carl E. Waltman, util. supt.; 480 met.; no gen.; pur. 4,030,600 kWh; rev. $285,268. (1914) 2

PRATT Mun. Power Plant, 321 W. 10th St., 67124, 316/672-2022, Arlyn Bradford, supt.; 4,000 met.; gen. 23,500 kW, 22,000 kW steam, 1,500 kW eng., 50 million kWh; pur. 5 million kWh. (1910) 2

PRESCOTT City Elec. Dept., 66767, 913/471-2421, Elaine Shroyer, city clerk; 153 met.; no gen.; pur. 1.2 million kWh; rev. $52,876. (1921)

RADIUM Light Dept., 67571, 316/982-4695, John Paden, city clerk; 34 met.; no gen.; pur. 47,843 kWh; rev. $30,141. 2

ROBINSON, City of, Elec. Dept, City Hall, 66532, 913/544-6850, Loren Davenport, mayor; 158 met.; no gen.; pur. 1,250,400 kWh; rev. $11,920. 2

RUSSELL, City of, 135 W. Eighth, 67665, 913/483-6311, Earl Homewood, elec. util. dir.; 3,387 met.; gen. 5,000 kW oil-fired 18,143 kW dual-fuel eng., 63,424,600 kWh; sales 54,945,512 kWh; rev. $2,917,729. (1910) 2

SABETHA Mun. Light Dept., 66534, Melvin Mowder, pur. agt.; 1,414 met.; total gen. 11,562 kW; pur. none; rev. $598,512. 2

ST. FRANCIS Mun. Water & Light, 67756, 913/332-3031, Bernard C. Roelfs, city supt.; 1,100 met.; gen. 9,146,845 kWh; sales 7,551,266; rev. $646,068. (1914) 2

ST. JOHN Mun. Box 367, 67576, 316/549-3536, Goldie Green, city clk., 1,076 met.; gen. 3,628 kW, 2,440,400 kWh; sales 8,140,196 kWh; rev. $467,166. (1910) 2

ST. MARY'S Mun. Light & Water Dept., 412 W. Bertrand Ave., 66536, 913/437-2311, Henry Beseau, city mgr.; 800 met.; no gen.; pur. 10,689,600 kWh; rev. $643,203. (1908) 2

SAVONBURG Elec. Light Dept., 66772, Don Ellison, city clerk; 45 met.; no gen.; pur. 311,200 kWh; rev. $14,000. 2

SCRANTON, City of, Box 96, 66537, 913/793-2414, Kathleen Stoke, city clk.; 296 met.; no gen.; sales 1,962,997 kWh; rev. $149,442. 2

SENECA City Elec., Box 40, 66538, 913/336-3537, Frank Rusche, elec. supt.; 1,189 met.; no gen.; pur. 15 million kWh; rev. $504,366. (1914) 6

SEVERANCE Elec. Dept., 66081, 913/359-6694, Leo Zeltner, city clerk; 55 met.; no gen.; pur. 281,000 kWh; rev. $14,991. 2

SEWARD Elec. Dept., 67577, 316/458-5731, Gail Daly, city clerk; 44 met.; no gen.; pur. 342,000 kWh. 2

SHARON SPRINGS, City of, Box 490, 67758, 913/852-4232, Norman L. (Pete) Sharp, city supt.; 533 met.; gen. 3,117 kW dual-fuel; sales 4,883,957 kWh; rev. $443,669 (1918) 2

STAFFORD Mun. Power Plant, 519 S. Boston, 67578, 316/234-5561, John C. Jones; 911 met.; gen. 3,915 kW dual-fuel, 2,470,700 kWh; pur. 5,478,400 kWh; rev. $460,662. 2

STERLING Mun. Light & Power Dept., Box 287, 67579, 316/278-3411, Randy Wetmore, city mgr.; 1,111 met.; gen. 5,840 kW eng., 10.6 million kWh; pur. 1.5 million kWh; rev. $651,419. (1899)

STOCKTON Mun. Power Plant, box 512, 67669, 913/425-6703, Clark Stocking, city mgr.; 981 met.; gen. 6,200 kW dual-fuel; sales 9,061,680 kWh; rev. $714,960. (1908) 2

SUMMERFIELD Water & Elec. Dept., 66541, Olynn Larmore, mayor, 125 met. no gen. 2

TIPTON, City of, Main St., 67485, 913/373-4135, Virgil Jeardoe, supt.; 145 met.; no gen.; pur. 1.4 million kWh; rev. $120,000. 2

TORONTO Mun. Light Plant, Box 235, 66777, 316/637-2605, Clyde Boone, supt.; 273 met.; no gen.; pur. 1,801,600 kWh; rev. $113,321. 2

TROY, City of, Box 506, 137 W. Walnut, 913/985-2265, 66087, Clarence Blake, mayor; 640 met.; no gen.; pur. 5,191,200 kWh; rev. $336,854. (1911) 2

UDALL Water & Light Dept., 109 N. Clark St., 67146, 316/782-3512, Corbett Wilson, supt.; 325 met.; no gen.; pur. 3,451,200 kWh; rev. $129,041. (1939) 2

VERMILLION, City of, 66544, Don White, supt.; 103 met.; no gen.; rev. $28,353.

WAMEGO Light & Water, Box 86, 66547, 913/456-9119, Lyle H. Dresher, city mgr.; 1,581 met.; gen. 8,310 kW dual-fuel eng., 8,396,383 kWh; pur. 12,894,600 kWh; rev. $1,097,591. (1908) 2

WASHINGTON Mun. Power Plant, Park Road, Box 296, 66968, 913/325-2231, Ivan W. Hinkle, power plant supvr.; 842 met.; gen. 6,861 kW dual-fuel, 8,857,000 kWh; pur. none; rev. $589,483. (1938) 2

WATERVILLE Mun. Light Plant, 66548, 913/785-2367, A. C. Tryon, util. supt.; 410 met.; no gen.; pur. 3.6 million kWh; rev. $134,287. 2

WATHENA Mun. Elec. Lighting System, 66090, 913/989-4711, Greg Phelps, supt.; 600 met.; pur.

WEBBER Elec. Dept., 66970, 913/753-4401, Glen Bailey, mayor. 2

WELLINGTON, Mun. Utils., 317 S. Washington, 67152, 316/326-3631, Art Preston, city mgr.; 4,123 met.; gen. 32,500 kW gas, 1,000 kW dual-fuel 81,187,200 kWh; sales 73,504,444 kWh; rev. $4,108,208. (1902) 2

WINFIELD Mun. Elec. Util., Box 646, 67156, 316/221-2183, John W. Elder, dir., 7,276 met.; gen. 56,000 kW, 45,000 kW gas, 11,000 kW gas turbine, 107,802,000 kWh; pur. 31,366,100 kWh; rev. $6,135,065. (1904) 2

KENTUCKY

(Systems designated "TVA" are distributors of Tennessee Valley Authority power and purchase all of their power from TVA.)

BARBOURVILLE Water & Elec. Co., Box 651, 40906, 606/546-3187, Randall Young, gen. mgr.; 3,154 met.; no gen.; pur. 52,080,000 kWh; rev. $2,549,506. (1938) 2

BARDSTOWN, City of, Box 368, 40004, 502/348-5947, Larry Hamilton, city engr.; 2,470 met.; no gen.; sales 55,700,000 kWh. 1

BARDWELL City Utils., Box 277, 42023, 502/628-3833, Harry C. Ward, mgr.; 557 met.; no gen.; pur. 7,204,200 kWh; rev. $259,265. (1941) 2

BENHAM City Utils., City Hall, 40807, Malcolm Barr Sr., chmn., power bd.; 320 met.; rev. $190,000. 1

BENTON Elec. System, Box 124, 42025, 502/527-3666 or 527-3651, Jim Owens, mgr.; pur. 44,921,982 kWh; (TVA) (1941) 2

BEREA College, Utils., CPO 2337, 40404, 606/986-4611, Donald Bewley, util. adm.; 3,293 met.; sales 71,315,000 kWh; rev. $2,593,914. 2

BOWLING GREEN Mun. Utils., 801 Center St., Box 478, 42101, 502/782-1200, James Tabor, acting gen. mgr.; 17,045 met.; pur. 528,757,059 kWh; rev. $19,275,928. (TVA) (1942) 2

CORBIN City Util. Comm., 901 S. Main St., 40701, 606/528-4026, George P. Rains, gen. mgr.; 3,828 met.; no gen.; pur. 58.5 million kWh; rev. $1,957,391. 1

FALMOUTH City Utils., 41040, 606/654-6937, Pete Lawson, supt.; no gen.; rev. $450,000. 1

FRANKFORT Elec. and Water Plant Bd., 315 W. Second St., Box 308, 40601, 502/223-3401, John C. Wagner, gen. mgr.; 16,456 met.; no gen.; pur. 417,372,000 kWh; rev. $13,134,040. (1943) 2

FRANKLIN Elec. Plant Bd., 309 N. High St., Box 429, 42134, 502/586-4441, John T. Butts, supt.; 3,695 met.; sales 133,609,820 kWh; rev. $5,170,500 (TVA) (1943) 2

FULTON Elec. System, 101 Nelson Tripp Place, Box 130, 42041, 502/472-1362, Billy Moss, mgr.; 1,789 met.; sales 42,011,116 kWh. (1962) 2

GLASGOW Elec. Plant Bd., 100 Mallory Drive, 42141, 502/651-8341, C. Paul White, gen. mgr.; 5,439 met.; no gen.; sales 202,637,401 kWh; rev. $7,804,088. (TVA) (1962) 2

HENDERSON Mun. Power & Light, 4th & Water Sts., Box 8, 42420, 502/826-2726, Bill L. Perry, gen. mgr.; 11,052 met.; gen. 340,000 kW, 338,000 kW coal, 2,000 kW dual-fuel, 2,277,867,000 kWh; sales 2,180,642,672 kWh; rev. $20,097,914. (1897) 2

HICKMAN Elec., Box 228, 42050, 502/236-3951, James Eakes, mgr.; 1,351 met.; sales 18,546,199 kWh; rev. $901,239. (TVA) (1970) 2

HOPKINSVILLE Elec. Plant Bd., 101 N. Main St., Box 544, 42240, 502/887-4210, W. Howell Hightower supt.; 11,989 met.; no gen.; sales 311,266,921 kWh; rev. $11,849,316. (TVA) (1942) 2

MADISONVILLE Mun. Light & Water Plant, E. Center St., Box 704, 42431, 502/821-0903, J. T. Tarpley, mgr.; 7,526 met.; no gen.; pur. 153.5 million kWh. (TVA) (1922) 0

MAYFIELD Elec. & Water Systems, 301 E. Broadway, 42066, 502/247-4661, Joe E. Rister, gen. supt.; 5,603 met.; pur. 121,097,525 kWh; rev. $4,871,672. (TVA) (1942) 2

MONTICELLO, City of, Elec. Plant Bd., 615 Columbia Ave., 42633, 606/348-8102, James H. McCune, supt.; 2,782 met.; sales 66,036,675 kWh; rev. $2,450,220. (TVA) (1954) 2

MURRAY Elec. System, Box 1095, 42071, 502/753-5312, Ron Underwood, mgr.; 5,751 met.; sales 181,206,371 kWh; rev. $7,010,452. (TVA) (1942) 2

NICHOLASVILLE, City of, Elec. Dept., 517 N. Main St., Box 158, 40356, 606/885-9473, David House, mgr.; 4,000 met.; no gen.; pur. 64,800,000 kWh; rev. $2,100,000 2

OLIVE HILL, City of, Mun. Power, Box 460, 41164, 606/286-2192 Alice Fielding, util. clerk; 1,190 met.; no gen.; rev. $575,723. 2

OWENSBORO Mun. Utils., Box 806, 42302, 502/926-3200, John P. Pace, gen. mgr.; 24,678 met.; gen. 415,000,000 kW; 415,000,000 kW coal; 572,381,000 kWh; sales 538,703,813 kWh; rev. $17,847,433. (1900) 2

PADUCAH Power System, 1400 Broadway, Box 180, 42001, 502/442-2711, W. L. Borgerding, gen. mgr.; 19,912 met.; pur. 462,242,205 kWh; rev. $19,089,735. (TVA) (1961) 2

PARIS, City of, 800 Pleasant St., 40361, 606/987-2630, Ronald K. Bailey, dir. of elec. utils.; 2,164 met.; gen. 11,000 kW oil (eng.), 176,400 kWh; rev. $1,195,729. (1931) 2

PRINCETON Elec. Plant Bd., Box 608, 42445, 502/365-2031, Walter R. Smith, supt.; 3,772 met.; no gen.; sales 63,458,450 kWh; rev. $2,895,149. (TVA) (1961) 2

PROVIDENCE Mun. Utils., North Willow St., Box 128, 42450, 502/667-5463, James A. Gooch Jr., mayor; 1,958 met.; no gen.; pur. 24,480,000 kWh; rev. $932,973. (1921) 2

RUSSELLVILLE, City of, Elec. Plant Bd., Box 208, 42276, 502/726-2466, George M. Wheeler, supt.; 3,625 met.; pur. 94,267,200 kWh; rev. $3,525,212. (TVA) (1942) 2

VANCEBURG Elec. Sys., Box 117, 41179, 606/796-2641, Donald Burton, supt.; 2,245 met.; no gen.; sales 24,672,375 kWh; rev. $1,088,019. (1939) 2

WILLIAMSTOWN Util. Comm., Main St., 41097, William T. Caldwell, supt.; no gen.

LOUISIANA

ABBEVILLE Water & Light Plant, 717 Veteran Memorial Drive, 70510, Joseph E. Vise, supt.; 4,300 met.; no gen.; pur. 62 million kWh; rev. $3,154,085.

ALEXANDRIA Utilities Division, City Hall, Box 71, 71301, 318/473-1160, R. L. Lawrence, dir. of utils.; 20,000 met.; gen. 175 kW gas steam, 424,487,000 kWh; pur. 91,306,000 kWh; rev. $26,107,000. (1907) 2

BOYCE Mun. Water & Light Plant, 71409, 318/793-2175, Donald Guagnoli, supt.; 800 met.; no gen. 1

ERATH, Town of, 115 W. Edwards, 70533, 318/937-8140; Melinda Simon; 781 met.; no gen.; pur. 13,922,000 kWh; rev. $569,472. 2

GUEYDAN Mun. Plant, 600 Main St., 70542, 318/536-9415, J. Roy Guidry, supt.; 748 met.; no gen.; pur. 14,255,000 kWh; rev. $668,954. 2

HOUMA, City of, Box 6097, 70361, 504/868-5050, John E. Carlson Jr., city elec. engr.; 8,903 met.; gen. 108,000 kW, 80,648 kW gas, 3,000 kW gas-fired, 14,000 kW dual-fuel, 10,000 kW gas turbine, 280,000,000 kWh; sales 247,180,420; rev. $9,140,000. (1923) 2

JONESVILLE Power & Light Dept., Box 428, 71343, 318/339-2051, Ted Husser, supt.; 1,100 met.; no gen.; pur. 30 million kWh.

KAPLAN Mun. Water & Light Plant, 70548, Newton Bercier, supt.

LAFAYETTE, City of, Utils. Systems, Box 4017-C, 70502, 318/261-8808, T. J. Labbe, dir.; 31,753 met.; gen. 362,000 kW gas; 265,000 kW coal, 345,000 kWh; sales 854,612,248 kWh; rev. $25,676,891. (1897) 2

MINDEN Light & Water Dept., Box 580, 71055, 318/377-2144, Gordon Bartage, supt.; 6,125 met.; gen. 36,000 kW, 25,000 kW steam, 11,000 kW dual-fuel, 74,421,000 kWh; pur. 35,916,000 kWh; rev. $6,498,932. (1920) 2

MORGAN CITY Mun. Power Plant, 808 Florence St., Box 1218, 70380, 504/385-1770, Joseph J. Cefalu, supt.; 6,800 met.; gen. 70,000 kW, 62,000 kW steam, 8,000 kW eng., 133,000,000 kWh; pur. 57,900,000 kWh; rev. $3,940,000. (1934) 2

NATCHITOCHES, City of, Box 37, 71457, 318/352-2901, Robert J. Tynes, dir. utils.; 6,085 met.; gen. 53,200 kW, 43,500 kW steam, 9,700 kW eng.; pur. 62,586,000 kWh. (1901) 2

NEW ROADS Mun. Light & Water Dept., 237 W. Main St., 70760, 504/638-8047, Roy E. Davis, supt.; 1,961 met.; gen. 9,500 kW dual-fuel eng.; 7,333,000 kWh; pur. 22,962,000 kWh. (1903) 2

OPELOUSAS Elec. & Water System, 70570. **(Leased July 1, 1981, for 10 years to Southwest Louisiana Electric Corp.)**

PLAQUEMINE City Light & Water Plant, City Hall, 70764, 504/687-4796, Ron Losik, util. supt.; 4,500 met.; gen. 44,000 kW gas, 3,000 kW oil-fired, 10 million kWh; pur. 65 million kWh; rev. $7,780,000. (1949) 2

RAYNE Mun. Power Plant, Box 69, 70578, 318/334-4170, Pierre Gary, supt.; 3,550 met.; gen. 8,500 kW oil-fired eng.; pur. 59,261,000 kWh; rev. $2,623,820. (1903) 2

RUSTON Util. System, Box 280, 71270, 318/255-0800, Max W. Albritton, supt. of utils.; 7,519 met.; gen. 91,000 kW, 81,000 kW gas, 10,000 kW dual-fuel, 248,536,300 kWh; pur. 8,523,000 kWh; rev. $12,701,985. (1920) 2

ST. MARTINVILLE, City of, 121 New Market St., 70582; Tom Lovas, supt.; 2,654 met.; pur. 39,010,000 kWh; rev. $1,928,125. 2

VIDALIA Mun. Utils., 409 Texas St., 71373, 318/336-5206, Lovice B. Beard, mgr.; 2,352 met.; no gen.; pur. 31.6 million kWh; rev. $745,368. (1905)

VINTON, Town of, 1200 Horridge St., 70668, 318/589-7453, E. L. Bahnsen, supt. pub. works; 1,555 met.; no gen.; pur. 24,590,000 kWh; rev. $1,234,920. (1910) 2

WELSH, Town of, Box 786, 70591, 318/734-2231, Robert J. Louviere, supt. pub. works; 1,546 met.; no gen.; pur. 26,339,000 kWh; rev. $1,041,205. (1926) 2

WINNFIELD, City of, Utils. Dept., Box 312, 71483, 318/628-4452, J. D. Jones, elec. supt.; 3,053 met.; no gen.; pur. 59,892,000 kWh; rev. $1,526,043. (1945) 2

MAINE

HOULTON Water Co., Box 726, 04730, 207/532-2259, Paul W. Coleman, gen. mgr.; 4,648 met.; no gen.; sales 46,658,027 kWh; rev. $2,166,760. (1908) 2

KENNEBUNK Light & Power Dist., 36 Water St., 04043, 207/985-3311, Phillip R. Davis, gen. mgr.; 2,813 met.; gen. 150 kW hydro, 189,114 kWh; pur. 46.6 million kWh; rev. $1,434,692. (1903)

LEWISTON City of, Island Ave., 04240, 207/782-8511, Denis R. Caron, elec. supt.; (no residential meters; facility used only for water pumping and street lighting;) gen. 750 kW hydro, 5.3 million kWh. Municipal use only. 2

LUBEC Water & Elec. Dist., 24 Water St., 04652, 207/733-5583, Robert B. Miller, mgr.; 1,167 met.; no gen.; sales 7,138,044 kWh; rev. $584,976. (1901) 2

MADISON Elec. Works, 26 Weston Ave., Box 190, 04950, 207/696-4401, Norman E. Sawyer, supt.; 2,100 met.; gen. 300 kW hydro, 2,040,600 kWh; pur. 21,258,000 kWh; rev. $1,383,018. (1897) 2

VAN BUREN Light & Power Dist., 67 Main St., 04785, 207/868-3321, Louis F. Parent, mgr.; 1,478 met.; no gen.; sales 15,097,284 kWh; rev. $813,605. (1915) 2

MARYLAND

BERLIN, Town of, 10 Williams St., 21811, 301/641-2770, Gary Bennett, supt.; 1,100 met.; gen. 3,592 kW, 6.2 million kWh; pur. 20.1 million kW; rev. $1,406,286. (1919) 6

EASTON Utils. Comm., 11 S. Harrison St., 21601, 301/822-6110, William H. Corkran Jr. (Roger Judd after 4-1-83), gen. mgr. 5,512 met.; gen. 25,150 kW oil-fired, 22,660 kW dual-fuel, 52,701,100 kWh; pur. 76,548,000 kWh; rev. $10,094,366 2

HAGERSTOWN Mun. Elec. Light Plant, 600 S. Cannon Ave., 21740, 301/790-2600, R. W. Jerrim, util. mgr.; 17,105 met.; gen. 25,000 kW oil, sales 202,953,529 kWh; rev. $9,066,902. 2

THURMONT Mun. Light, 10 Frederick Rd., 21788, 301/271-7313, Marion Wm. Rice, supt. pub. wks.; 1,600 met.; no gen.; pur. 32.3 million kWh; rev. $900,100. (1910) 2

WILLIAMSPORT Elec. Light Plant, 21795, 301/223-7711, M. Lee Draper, supt.; 800 met.; no gen.; pur. 12.2 million kWh; rev. $606,258 2

MASSACHUSETTS

ASHBURNHAM Mun. Light Plant, 86 Central St., 01430, 617/827-4423, Robert W. Gould, mgr.; 2,097 met.; no gen.; pur. 16,596,429 kWh; rev. $1,250,489. (1907) 2

BELMONT Mun. Light Dept., 450 Concord Ave., 02178, 617/484-2780, Joseph W. Mannix, mgr.; 10,434 met.; no gen.; sales 84,595,110 kWh; rev. $6,679,185. (1898) 2

BOYLSTON, Town of, Sanatorium Rd., 01505, 617/869-2626, Edward H. Kimball, mgr.; 1,479 met.; no gen.; sales 17,956,400 kWh; rev. $1,240,083. (1912) 2

BRAINTREE Elec. Light Dept., 44 Allen St., 02184, 617/848-1130, Donald H. Newton, mgr.; 12,020 met.; 96 kW oil (comb. cycle) 5,000 oil (eng.); gen. 12,410,000 kWh; sales 243,411,296 kWh; rev. $22,601,015. (1892) 2

CHESTER Mun. Light Dept., Box 307, 01011, 413/354-7811, Ralph A. Philbrook Jr., mgr.; 600 met.; no gen.; pur. 7.1 million kWh; rev. $297,618. (1926) 6

CHICOPEE Mun. Light Plant, 725 Front St. 01021-0405, 413/598-8311, Herve L. Plasse, mgr.; 21,297 met.; gen. 8,250 kW oil-fired; 1,304,100 kWh; pur. 291,923,150 kWh; rev. $17,289,264. (1894) 2

CONCORD Mun. Light Plant, 135 Keyes Rd., 01742, 617/369-2500, John R. O'Neil, plant supt.; 6,153 met.; no gen.; sales 110,422,964 kWh; rev. $8,871,385. (1895) 2

DANVERS Elec. Div., 2 Burroughs St., 01923, 617/774-0005, Michael Madore, plant supt.; 9,177 met.; no gen.; sales 210,720,299 kWh; rev. $15,147,168. (1889) 2

GEORGETOWN Mun. Light Dept., Moulton and W. Main Sts., 01833, 617/352-8611, James E. Hazen, mgr.; 1,991 met.; no gen.; pur. 21.7 million kWh; rev. $986,715. (1912) 1

GROTON Elec. Light Dept., Station Ave., 01450, 617/448-6655, Roger H. Beeltje, mgr.; 2,752 met.; no gen.; sales 23,690,132 kWh; rev. $1,892,557. (1909) 2

GROVELAND Mun. Light Dept., 23 School St., 01834, 617/372-1671, Gerald E. Hill, acting mgr.; 1,736 met.; no gen.; sales 16,139,236 kWh; rev. $1,186,410. (1907) 2

HINGHAM Mun. Light Plant, 19 Elm St., 02043, 617/749-0134, Joseph Spadea Jr., mgr.; 8,217 met.; no gen.; sales 109,558,374 kWh; rev. $7,882,138. (1894) 2

HOLDEN Mun. Light Dept., Reservoir St., 01520, 617/829-4719, Neil E. Murray, mgr.; 5,552 met.; no gen.; pur. 71.1 million kWh; rev. $3,064,939. (1912) 1

HOLYOKE Gas & Elec. Dept., 70 Suffolk St., 01040, 413/534-0221, George F. Leary, mgr.; 18,940 met.; gen. 37,480 kW, 24,800 kW oil or gas, 10,000 kW oil turbine, 2,680 kW hydro, 14,792,630 kWh; sales 212,725,663 kWh; rev. $16,111,777. (1902) 2

HUDSON Light and Power Dept., 49 Forest Ave., 01749, 617/568-8736, Horst Huehmer, mgr.; 8,024 met.; gen. 21,150 kW; 3,000 kW oil (eng.), 18,150 kW dual-fuel, 23,191,100 kWh; sales 136,504,954 kWh; rev. $9,865,805. (1897) 2

HULL, Town of, Mun. Light. Plant, 15 Electric Ave., 02045, 617/925-0051, Everett W. Lutzy (until 4-1-83), mgr.; 4,475 met.; no gen.; pur. 33.2 million kWh; rev. $1,804,186. (1894) 1

IPSWICH, Town of, Mun. Light Dept., 222 High St., 01938, 617/356-4331, Robert O'Meara, mgr.; 4,919 met.; gen. 9,195 kW eng., 1.3 million kWh; pur. 66.6 million kWh; rev. $3,245,024. (1904) 1

LITTLETON Elec. Light & Water Dept., Whitcomb Ave., 01460, 617/486-3104, Curtis J. Lanciani, gen. mgr.; 4,360 met.; pur. 63.7 million kWh; rev. $3,076,050. (1912) 1

MANSFIELD Mun. Elec. Dept., 50 West St., 02048, 617/339-7122, Chadwick Maurer, town mgr.; 4,406 met.; no gen.; pur. 145.6 million kWh; rev. $5,645,490. (1903) 1

MARBLEHEAD Mun. Light Dept., 80 Commercial St., Box 369, 01945, 617/631-0240, Richard L. Bailey, gen. mgr.; 9,239 met.; gen. 9,700 kW oil (comb. cycle), 6,000 oil (eng.); 1,788,995 kWh; sales 72,363,131 kWh; rev. $5,275,217. (1894) 2

MERRIMAC Mun. Light Dept., 2 School St., 01860, 617/346-8311, Raymond J. Bastarache, mgr.; 1,755 met.; no gen.; pur. 14,040,097 kWh; rev. $1,018,227. (1904) 2

MIDDLEBOROUGH Gas 7 Elec. Dept., Town Hall, Nickerson Ave., 02346, 617/947-1371, John Dunfey, mgr.; 8,347 met.; no gen.; sales 94,202,483 kWh; rev. $6,934,423. (1893) 2

MIDDLETON Mun. Light. Dept., S. Main St., Box 68, 01949, 617/774-4313, Mark Kelly, mgr.; 1,633 met.; no gen.; pur. 44.1 million kWh; rev. $1,988,136. (1914) 1

NORTH ATTLEBORO Elec. Dept., 43 S. Washington St., 02761, 617/699-7542, David Sweetland, mgr.; 8,538 met.; no gen.; pur. 103,279,705 kWh; rev. $7,387,388. (1894) 2

NORWOOD Mun. Light Dept., 404 Central St., Box 40, 02062, 617/762-0115, John J. Carroll, gen. mgr.; 13,348 met.; no gen.; pur. 202.5 million kWh; rev. $9,500,000. (1907) 1

PAXTON Mun. Light Dept., 578 Pleasant St., 01612, 617/756-9508, Harold L. Smith, mgr.; 1,379 met.; no gen.; pur. 16.9 million kWh; rev. $842,382. (1913) 1

PEABODY Mun. Light Plant, 70 Endicott St., 01960, 617/531-5975, Bruce P. Patten, mgr.; 18,585 met.; gen. 3,000,000 kWh; sales 238,678,723 kWh; rev. $16,450,641. (1891) 2

PRINCETON Mun. Light Dept., Box F, 01541, 617/464-2815, Richard F. Wheeler, mgr.; 1,084 met.; no gen.; pur. 7.2 million kWh; rev. $496,139. (1913) 1

READING Town of, Mun. Light Dept., 25 Haven St., Box 150, 01867, 617/944-1340, Norbert D. Rhinerson, gen. mgr.; 20,452 met.; no gen.; sales 419,179,592 kWh; rev. $33,253,540. (1894) 2

ROWLEY Mun. Lighting Plant, 47 Summer St., 01969, 617/948-3992, G. Robert Merry, mgr.; 1,686 met.; no gen.; sales 13,429,923 kWh; rev. $1,125,117. (1910) 2

RUSSELL Mun. Light Dept., Shattuck Rd., 01071, 413/862-4400, Herman L. Boyden, mgr.; 361 met.; no gen.; pur. 3.5 million kWh; rev. $132,637. (1920) 1

SHREWSBURY's Elec. Light Plant, 100 Maple Ave., 01545, 617/845-4881, James E. Baker, mgr.; 9,164 met.; gen. 13,750 kW eng.; 3,495,000 kWh; pur. 160,828,213 kWh; rev. $9,205,220. (1908) 2

SOUTH HADLEY, Town of, Elec. Light Dept., 85 Main St., 01075, 413/536-1050, Wayne D. Doerpholz, acting mgr.; 6,172 met.; no gen.; sales 99,320,438 kWh; rev. $6,995,038. (1914) 2

STERLING Mun. Elec. Light Dept., Box 327, 01564, 617/422-6662, William H. Rugg, mgr.; 1,974 met.; no gen.; pur. 27,491,310 kWh; rev. $1,787,637. (1911) 1

TAUNTON Mun. Lighting Plant, 55 Weir St., 02780, 617/824-5844, Joseph Blain, mgr.; 22,282 met.; gen. 25,000 kW oil (steam turbine); 110,000 kW oil (comb. cycle); 275,585,000 kWh; sales 525,736,380 kWh; rev. $40,502,600. (1897) 2

TEMPLETON Mun. Lighting Plant, 2 School St., Baldwinville, Mass., 01436, 617/939-5323, Gerald P. Skelton, mgr.; 2,482 met.; no gen.; sales 49,035,857 kWh; rev. $3,060,348. (1906) 2

WAKEFIELD Mun. Light Dept., 9 Albion St., 01880, 617/245-0027, William J. Wallace, mgr.; 9,715 met.; gen. 14,088 kW oil, comb. cycle; 879,972 kWh; sales 105,482,004 kWh; rev. $8,036,767. (1894) 2

WELLESLEY, Town of, Mun. Lighting Plant, 455 Worcester St., Box 364, Wellesley Hills, 02181, 617/235-7600, John Larch, mgr.; 8,910 met.; no gen.; pur. 153,340,293 kWh; rev. $11,197,600. (1892) 2

WEST BOYLSTON Mun. Lighting Plant, 4 Crescent St., 01583, 617/835-3681, Charles H. Coughlin, mgr.; 2,438 met.; gen. 4,526 kW oil Comb. cycle; sales 43,148,330 kWh; rev. $2,764,598. (1910) 2

WESTFIELD Gas & Elec. Light Dept., 100 Elm St., Box 990, 01085, 413/562-5141, Daniel Golubek, mgr.; 13,709 met.; no gen.; sales 214,236,206 kWh; rev. $13,100,282. (1899) 2

MICHIGAN

BARAGA, Village of, Box 285, 49908, 906/353-6237, J. H. Ross, supt.; 525 met.; no gen.; pur. 3 million kWh. 2

BAY CITY Elec. Light & Power, 900 S. Water, 48706, 517/894-8344, Richard G. Harris, dir., elec. utils; 13,708 met.; gen. 5,750 kW dual-fuel, sales 165,880,727 kWh; rev. $9,709,132 2

CHARLEVOIX City of, 210 State St., 49720, 616/547-2271, James Brinker, city mgr.; 2,870 met.; no gen.; sales 30,123,294 kWh; rev. $1,715,134. 2

CHELSEA Elec. & Water Dept., 104 E. Middle St., 48118, 313/475-1771, Charles Hafner, supt.; 1,569 met.; no gen.; sales 21,531,755 kWh; rev. $1,264,850. (1898) 2

CLINTON Bd. of Pub. Works, 119 E. Michigan Ave., 49236, 517/456-4207, Richard W. Sharpe, supt. pub. works; 800 met.; gen. 2,310 kW eng.; 10.4 million kWh; pur. 1.9 million kWh; rev. $288,000.

COLDWATER Bd. of Pub. Utils., 28 W. Chicago St., 49036, 517/279-9531, James R. Endicott, dir.; 5,390 met.; gen. 21,500 kW, 8,000 kW coal, 10,500 kW oil-eng., 3,500 kW dual-fuel, eng., 58,488,275 kWh; sales 113,205,831 kWh; rev. $6,620,236. (1891) 2

CROSWELL Light & Power Dept., 120 E. Sanborn Ave., 48422, 313/679-2120-2121, Parry G. Baer, mgr.; 980 met.; no gen.; pur. 24 million kWh; rev. $1,014,433. (1897) 0

CRYSTAL FALLS Elec. Dept., 401 Superior Ave., 49920, 906/875-6650, Walter E. Hagglund, city mgr.; 1,472 met.; gen. 1,100 kW hydro; 6,271,300 kWh; pur 8,522,000 kWh; rev. $753,000 (1891) 2

DAGGETT Elec. Dept., Gen. Delivery, 49821, 906/753-6915, Stanley Saltz, maint.; 200 met.; no gen.; pur. 1,137,000 kWh. (1912) 2

DETROIT City of, Pub. Lighting Dept., 9449 Grinnell Ave., 48213, 313/267-7255, Thomas Thompson, supt.; 1,246 met.; gen. 184,000 kW, 94,000 kW oil, 60,000 kW gas turbine, 30,000 kW gas comb. turbine, 174,855,000 kWh; pur. 496,652,000 kWh; rev. $28,875,461. (1893) 2

DOWAGIAC Dept. of Pub. Services, 203 Chestnut St., 49047, 616/782-8200, Larry J. Rohacs, dir.; 2,295 met.; gen. 3,850 kW, 116,000 kWh; pur. 43.3 million kWh; rev. $1,687,639. (1936) 0

EATON RAPIDS, City of, 206 S. Main St., 48827, 517/663-8118, Dennis O. Craun, city mgr.; 1,824 met.; no gen.; pur. 25,612,000 kWh; rev. $1,451,565. (1898) 2

ESCANABA Mun. Elec. Util., 120 N. Eighth St., 49829, 906/786-0061, Edwin A. Korpi, supt.; 7,407 met.; gen. 25,000 kW steam; pur. 96.1 million kWh; rev. $4,528,000. (1894) 1

GLADSTONE Elec. Dept., 1100 Delta Ave., 49837, 906/428-1633, Lawrence M. Young, supt.; 2,800 met.; gen. 19.2 million kWh; pur. 1.8 million kWh; rev. $935,000. (1955) 0

GRAND HAVEN Bd. of Light & Power, 650 Harbor Ave., 49417, 616/846-6250, Glenn Eaton, acting gen. mgr.; 8,674 met.; gen. 39,200 kW, 20,000 kW coal, 11,000 kW oil-fired, 2,200 kW gas-fired, 6,000 kW dual-fuel, 125,317,800 kWh; sales 145,187,424 kWh; rev. $8,264,555. (1898) 2

HARBOR SPRINGS, City of, 170 Zoll St., 49740, 616/526-2122, Gerald Felix, city mgr., Douglas V. Porter, elec. dist. supt.; 2,182 met.; no gen.; pur. 18.1 million kWh; rev. $961,450. (1898) 1

HART Hydro Elec., 407 State St., 49420, 616/873-2434, Vern Lambrix, supt.; 1,344 met.; gen. 2,974 kW, 964 kW oil-fired eng., 1,690 kW dual-fuel eng., 320 kW hydro gas turbine, 4,762,000 kWh; pur 12,446,600 kWh; rev. $853,000. (1927) 2

HILLSDALE Bd. of Pub. Util., City Hall, 49242, 517/437-3688, Ronald D. Neer, dir. of utils.; 4,938 met.; gen. 21,000 kW, 2,500 kW oil-fired eng., 18,500 kW dual-fuel eng., 56,845,000 kWh; pur. 44,671,000 kWh; rev. $5,942,500. (1893) 2

HOLLAND Bd. of Pub. Works, 268 River Ave., 49423, 616/396-4628, Tim Morawski, gen. mgr.; 14,400 met.; gen. 91,800 kW, 71,800 kW coal, 20,000 kW oil-fired, 297,260,000 kWh; sales 275,215,346 kWh; rev. $12,573,665. (1893) 2

L'ANSE, Village of, Elec. Util., 101 Main St., 49946, 906/524-6116, Bruce G. Carlson, supt.; 1,500 met.; no gen.; pur. 10,557,000 kWh; rev. $577,346. (1908) 2

LANSING Bd. of Water & Light, 123 W. Ottawa St., 48901, 517/487-1885, Earl F. Brush, dir. and gen. mgr.; 80,529 met.; gen. 580,000 kW coal, 1,000 kW hydro, sales 2,303,785 kWh; rev. $107,200,417. (1892) 2

LOWELL Mun. Light & Power Plant, 127 N. Broadway, 49331, 616/897-7552, John T. Jones, supt.; 1,600 met.; gen. 5,566 kW, 4,936 kW eng., 630 kW hydro, 8.1 million kWh; pur. 7 million kWh; rev. $300,613.

MARQUETTE Bd. of Light & Power, 2200 Wright St., 49855, 906/228-6900, Wilbert W. Wiitala, dir.; 13,755 met.; gen. 75,300 kW, 33,600 kW steam, 23,700 kW gas turbine, 14,100 kW eng., 3,900 kW hydro, 187 million kWh; pur. 18.5

million kWh; rev. $11,964,661. (1889) 1

MARSHALL City Water & Elec. Works, 109 E. Michigan Ave., 49068, 616/781-3968, Richard C. Ashdown, admr.; 3,964 met.; gen. 13,080 kW, 12,761 kW eng., 319 kW hydro, 22.4 million kWh; pur. 34.7 million kWh; rev. $3,039,299. (1892) 1

NEGAUNEE City of, City Hall, 49866, 906/475-7220, Robert Johnson, supt., 2,230 met.; no gen.; sales 18,188,262 kWh; rev. $1,040,112. 2

NEWBERRY Water & Light, 307 E. McMillan, 49868, 906/293-8531, Keith Sleeper, supt.; 1,314 met.; gen. 4,540 kW dual-fuel, 142,000 kWh; pur. 17,160,650 kWh; rev. $733,842. (1890) 2

NILES Bd. of Pub. Works, 602 E. Main St., 49120, 616/683-4700, S. A. Brett, Mgr.; 6,633 met.; gen. 460 kW hydro, sales 92,525 kWh; rev. $3,958,983. (1894) 2

NORWAY City of L&P Dept., 915 Brown St., 49870, 906/563-9641, J. E. Stanchina, supt.; 1,768 met.; gen. 3,500 kW hydro, 24,345 kWh; pur. 2,747,900 kWh; $690,000. (1904) 2

PAW PAW, Village of, Dept. of Pub. Works, 110 Berrien St., 49079, 616/657-3169, Harry L. Bush, supt. of pub. works; 1,657 met.; no gen.; pur. 765,000 kWh; rev. $1,189,882. (1898) 2

PETOSKEY, City of, 200 Division St., 49770, 616/347-4105, Steven Hoffner, city mgr.; 3,377 met.; sales 54,415,529 kWh; rev. $2,982,844. 2

PORTLAND, City of, Elec. Utils., 259 Kent St., 48875, 517/647-6912, 647-7531, Nyle Blaschka, supt. elec. utils.; 1,746 met.; gen. 1,538 kW, 1,163 kW oil-fired, 375 kW hydro; 1.7 million kWh; pur. 19 million kWh; rev. $1,126,450. (1896) 1

ST. LOUIS Mun. Elec. Util., 412 N. Mill St., 68880, 517/681-5567, Ron Gibson, supt.; 1,703 met.; gen. 2,155 kW oil-fired, 1,360 kW dual-fuel, 360 kW hydro; 2,485,010 kWh, pur. 13,697,200 kWh; $840,571. (1888) 2

SEBEWAING Light & Water Dept., 110 W. Main, 48759, 517/883-2700, Arthur G. Reinhold, supt.; 1,100 met.; gen. 8,400 kW dual-fuel eng.; 3,000,000 kWh; pur. 19,000,000 kWh; rev. $1,200,000. (1911) 2

SOUTH HAVEN City of Bd., of Pub. Utils., Box 507, 49090, 616/637-5211, Paul L. Preston Jr., city mgr.; 5,979 met.; no gen.; sales 96,344,115 kWh; $3,608,748. (1902) 2

STEPHENSON City of, 49887, 906/753-2225, Stanley Saltz, supt.; 459 met.; no gen.; sales 5,149 kWh; rev. $202,077. (1920) 2

STURGIS, City of, Box 280, 49091, 616/651-2321, John E. Brand, city mgr.; 5,670 met.; gen. 11,230 kW, 4,350 kW oil (eng.), 6,000 kW dual-fuel, 880 kW hydro, 7,883,200 kWh; sales 121,582,230 kWh; rev. $5,581,536. (1911) 2

TRAVERSE CITY Light & Power Dept., 400 Boardman Ave., Governmental Center, Box 592, 49684, 616/941-2309, William P. Strom, exec. dir.; 6,909 met.; gen. 35,650 kW, 35,000 kW coal, 650 kW hydro, sales 143,723,725 kWh; rev. $7,625,983. (1912) 2

UNION CITY Elec. Dept., 215 W. High St., 49094, 517/741-8591, James E. Spencer, supt.; 1,000 met.; gen. 1,500 kW eng.; pur. 10.4 million kWh; rev. $612,049. 6

WAKEFIELD Light & Power Dept., 1211 Hancock St., 49968, 906/224-7041, Dale R. Soumis, city mgr.; 1,027 met.; no gen.; pur. 9.2 million kWh; rev. $193,800. (1913)

WYANDOTTE City of, Dept. of Mun. Service, 3005 Biddle Ave., 48193, 313/282-7100, Dale O. Simmons, gen. mgr.; 15,942 met.; gen. 56,000 kW 33,000 kW coal, 23,000 kW comb. cycle (gas), 136,000,000 kWh; pur. 28,309,587 kWh; rev. $8,512,927. (1892) 2

ZEELAND Bd. of Pub. Works, City Hall, Elm and Cherry Sts., 49464, 616/772-6212, Martin J. Hieftje, util. mgr.; 2,398 met.; gen. 22,000 kW dual-fuel eng., 75,076,000 kWh; pur 4,675,000 kWh; rev. $3,896,495. (1935) 2

MINNESOTA

ADA Water & Light Dept., 56510, 218/784-2211, P. Donovan, dir., pub. works; 1,350 met.; no gen.; pur. 16,268,533 kWh; rev. $483,811. 2

ADRIAN Pub. Util. Comm., 20 Maine Ave., 56110, 507/483-2680, Leo J. Hensen, supt.; 665 met.; no gen.; pur. 9,395,424 million kWh; rev. $322,053. 2

AITKIN pub. Util. Comm., 120 First St., N.W., 56431, 218/927-3222, Wilfrid Fossum, mgr.; 1,400 met.; gen. 2,400 kW oil-fired, 66,300 kWh; pur. 22,400,000 kWh; rev. $1,328,930. (1892) 2

ALEXANDRIA Light & Power, Bd. of Pub. Wks., 316 Fillmore St., 56308, 612/763-6501, Earl La Maack, gen. mgr.; 5,828 met.; gen. 9,145 kW dual-fuel, 56,480 kWh; sales 111,667,535 kWh; rev. $3,284,215. (1909) 2

ALPHA Elec. Dept., Box 97, 56111, 507/847-3557, Leonard G. Tauer, supt.; 159 met.; no gen.; sales 1,267,970 kWh; $66,503. (1915) 2

ALVARADO Mun. Elec. Dept., 56710, 218/965-4827, Herb Monk, supt.; 187 met.; rev. $42,000.

ANOKA, City of, elec. util., 215 Harrison St., 55303, 612/421-6630, Lewis Bradford, dir. of util.; 7,600 met.; no gen.; sales 127,166,527 kWh; rev. $5,500,973. (1901) 2

ARLINGTON Elec. & Water Dept., 312 W. Alden St., 55307, 612/964-2378, Russell Good, supt.; 775 met.; no gen.; pur. 11.2 million kWh; rev. $468,150. 2

AUSTIN Utils., 500 Fourth Ave., N.E., 55912, 507/433-8886, Norman E. Dietrich, gen. mgr.; 10,745 met.; gen. 64,685 kW, 30,000 kW coal, 29,685 kW oil, 5,000 kW gas turbine, pur. 58,582,000 kWh; rev. $9,260,616. (1900) 2

BAGLEY Pub. Utils. Comm., Box M, 56621, 218/694-2300, Bernie Stavig, supt.; 530 met.; no gen.; pur. 13.5 million kWh; $325,501. (1907) 1

BARNESVILLE Mun. Light & Power, Box 295, 56514, 218/354-2292, H. Gilbertson, supt.; 740 met.; gen. 1,500 kW eng.; pur. 8.1 million kWh; rev. $198,000.

BAUDETTE Light & Water Dept., Box 548, 56623, 218/634-2432, Darrell Nelson, supt.; 652 met.; gen. 1,936 kW eng., 168,070 kWh; pur. 7.2 million kWh; rev. $345,000. 1

BENSON, City of, 1411 Pacific Ave., 56215, 612/843-4775, Edward J. Shukle Jr., city mgr.; 1,758 met.; gen. 3,121 kW oil-fired, 21,960 kWh; sales 19,881,954 kWh; rev. $664,086. (1902) 2

BIGELOW City of, 56117, 507/683-2682, Paul Marco, city clerk; 148 met.; no gen.; pur. 1,585,200 kWh; rev. $66,602. 2

BIWABIK Water, Light, Power & Bldg. Comm., Box A, 55708, 218/865-6740, Jeffrey M. Jansen, supt.; 643 met.; no gen.; pur. 5,673,818 kWh; rev. $439,181. (1904) 2

BLOOMING PRAIRIE Pub. Utils., Box 55, 146 Third Ave. SE., 55917, 507/583-6683, George Curtin, actg. supt.; 1,073 met.; gen. 3,598 kW eng., 42,780 kWh; sales 10,734,880 kWh; rev. $483,241. (1931) 2

BLUE EARTH Light & Water Dept., 118 E. Sixth St., 56013, 507/526-2191, Richard Schroeder, gen. mgr.; 2,053 met.; gen. 946,000 kW coal, 432,600 kW gas, 125,000 kW oil (eng.), 1,009,400 kW dual-fuel, 2,513,000 kWh, pur. 30,385,425 kWh; rev. $1,986,422. (1905) 2

BRAINERD Bd. of Water & Light Dept., City Hall, 501 Laurel St., 56041, 218/829-8726, Walter Siolund, supt., 5,835 met.; no gen.; pur. 97,878,000 kWh; rev. $4,695,248. 2

BRECKENRIDGE Pub. Util., Box 410, 56520, 218/643-4681, Joe Adrian, pub. wks. dir., 1,700 met.; no gen.; pur 29,591,912 kWh; rev. $789,019. (1907) 2

BREWSTER Elec. Light & Power Plant, 56119, 507/842-5963, Kenneth Kluver, supt.; 300 met.; no gen.; pur. 2.4 million kWh.

BROWNTON Mun. Elec. Light Dept., City Hall, 55312, 612/238-5318, Carol Winterfeldt, city clerk; 324 met.; no gen.; pur. 3,840,000 kWh; rev. $151,905. 2

BUFFALO Mun. Elec. Dept., 212 Central Ave., 55313, 612/682-1181, Wallace I. Peterson, city admin., 2017 met.; no gen.; sales 28,515,056 kWh; rev. $1,226,908. (1921) 2

BUHL Water & Light Dept., Box 704, 55713, 218/258-3217, Mike Miklovich, supt.; 500 met.; pur. 4,333,003 kWh; rev. $252,321. 2

CALEDONIA Mun. Light & Water Dept., 231 E. Main St., 55921, 507/724-3450, R. Schmitz, supt.; 1,027 met.; no gen.; pur. 10.6 million kWh; rev. $232,000. (1903)

CEYLON Water & Light Dept., 56121, 507/632-4635, William F. Ditz, city clerk/treasurer; 247 met.; no gen.; pur. 79,987 kWh; rev. $25,726. 2

CHASKA City of, 205 E. Fourth St., 55318, 612/448-2851, William Radio, city admr., 2,803 met.; no gen.; pur. 59.2 million kWh; rev. $2,546,217. (1921) 2

DELANO Mun. Utils., 11 W. Bridge Ave., 55328, 612/972-3211, John F. Schultz, supt.; 1,042 met.; gen. 4,781 kW eng., 1.3 million kWh; pur. 12.6 million kWh; rev. $512,956. (1932)

DETROIT LAKES Pub. Util. Dept., 1025 Roosevelt Ave., Box 647, 56501, 218/847-7609, Greg Sherman, supt.; 4,386 met.; no gen.; pur. 84.788,496 kWh; rev $2,797,533. (1902) 2

DUNNELL, Village of, 56127, 507/695-2518, Laird Moore, city clerk; 120 met.; no. gen.; rev. $47,295. (1920s) 2

EAST GRAND FORKS Water & Light Dept., Box 322, 56721, 218/773-1163, Jerry Neppel, elec. supvr.; 3,700 met.; no gen.; pur. 86,036,530 kWh; rev. $2,570,440. (1906) 2

MINNESOTA
(continued)

EITZEN Power & Light, 55931, 507/495-3259, J. Anthony Stokman, clerk-treas.; 125 met.; no gen.; 1,690,000 kWh; rev. $82,984. (est. 1946) 2

ELBOW LAKE Mun. Elec., Box 1089, 56531, 218/685-4483, Harland D. Martinson, secy-power comm.; 955 met.; pur. 12.8 million kWh; rev. $501,000. (1965) 2

ELK RIVER Mun. Utils., 322 King Ave., 55330, 612/441-2020, Edson C. Stansfield, utils. supt.; 3,250 met.; gen. 1,100 kW oil-fired, 8,000 kW dual-fuel, 1.5 million kWh; pur. 44.7 million kWh; rev. $2,344,493. (1947) 1

ELY Water & Light Dept., 209 E. Chapman St., 55731, 218/365-3224, Albin Mavetz, supt.; 2,692 met.; no gen.; pur 27,141,840 kWh; rev. $1,353,716. 2

FAIRFAX Mun. Utils., 206 S. First St., 55332, 507/426-7255, Russell N. Mortenson, supt.; 582 met.; gen. 2,000 kW eng., 256,800 kWh; pur. 6.6 million kWh; rev. $161,000.

FAIRMONT Pub. Utils. Comm., 117 E. First St., Box 751, 56031, 507/235-6691, Douglas E. Cameron II, mgr.; 5,651 met.; gen. 36,000 kW, 24,000 kW steam, 12,000 kW dual-fuel, 128,242,400 kWh; pur. 52,210,000 kWh; rev. $6,631,104. (1902) 2

FOSSTON Mun. Light & Power, 220 E. First St., 56542, 218/435-1737, Russell W. Earls, supt. pub. wks.; 709 met.; gen. 954 kW eng., pur. 16.1 million kWh; rev. $380,310. (1941) 0

GILBERT Water & Light Dept., City Hall, 55741, 218/741-9443, Hazel Griffith, city clerk; 1,100 met.; no gen.; pur. 9,834,228 kWh; rev. $586,264. 2

GLENCOE Mun. Elec. Plant, 305 11th St. East, 55336, 612/864-5184, Joe Adrian, supt.; 1,900 met.; gen. 21,156 kW eng., 2.5 million kWh; pur. 44.4 million kWh; rev. $2,072,916. (1938) 2

GRAND MARAIS Pub. Util. Comm., Box 83, 55604, 218/387-1848, Glenn R. Bergstrom, mgr.; 900 met.; gen. 4,034 kW eng., 2.3 million kWh; pur. 8.7 million kWh; rev. $722,000. (1949) 1

GRAND RAPIDS Pub. Utils. Comm., Box 658, 55744, 218/326-3493, Roger Roy, supt.; 4,724 met.; no gen.; pur. 92,362,800 kWh. (1903) 2

GRANITE FALLS Mun. Power, 885 Prentice, 56241, 612/564-4430. Richard A. Voller, city mgr.; 1,500 met.; gen. 500 kW hydro, 2 million kWh; pur. 19 million kWh; rev. $800,000. (1890) 0

GROVE CITY Elec. Dept., City Hall, Box 84, 56243, 612/587-3351, Lois Turgeon, city clerk; 307 met.; no gen.; rev. $90,000.

HALSTAD Mun. Utils., 56548, 218/456-2128, Daniel R. Duklet, supt. of utils.; 385 met.; gen. 1,060 kW gas, sales 7,330,712 kWh; rev. $250,013. (1939) 2

HARMONY Water & Light, 55939, 507/886-5211, Arden Anderson, supt.; 751 met.; no gen.; pur. 10,800,000 kWh; rev. $288,504. 2

HAWLEY Pub. Utils., 56549, 218/483-3331, Merl[illegible] Schenck, supt.; 751 met.; gen. [illegible],445 kW, 770 kW oil-fired eng., 67[illegible] kW dual-fuel eng.; pur. 12,375,831 kWh; rev. $288,504. (1910) 2

HENNING Power & Light, 56551, 218/583-2402, Eldor Hagen, supt.; 458 met.; no gen.; pur. 6,418,778 kWh; rev. $190,658. (1956) 2

HIBBING Pub. Utils. Comm., Box 249, 55746, 218/263-7515, Karl E. Marietta, gen. mgr.; 7,938 met.; gen. 19,000 kW coal, sales 100,038,714 kWh; rev. $6,417,739. (1895) 2

HUTCHINSON Utils. Comm., 225 Michigan St., 55350, 612/587-4746, Rufus Alexander, gen. mgr.; 4,334 met.; gen. 745,000 kW oil, (comb. turbine), 599,416 kW oil, and 61,069,584 kW gas (comb. cycle), 1,423,180 kW oil and 15,443,820 kW gas (eng.); 79,281,000 kWh; sales 140,991,992 kWh; rev. $6,971,801. (1936) 2

JACKSON Mun. Power Plant, 504 Second St., 56143, 507/847-4410, William R. Holmes, supt.; 1,835 met.; gen. 900 kW oil eng., sales 27,642,235 kWh; rev. $928,536. (1913) 2

JANESVILLE Mun. Utils., 219 N. Main, 56048, 507/234-5112, Alan Junkers, plant supt., Clifford Coonrod, line supt.; 860 met.; gen. 3,176 kW dual-fuel eng., 773,400 kWh; pur. 6.7 million kWh; rev. $408,444 (1939) 1

KANDIYOHI, City of, 56251, 612/382-6110, William Schroeder, supt.; 215 met.; no gen.; sales 3,695,746 kWh; rev. $101,166. 2

KASOTA City of Elec., Box 218, 56050, 507/931-3290, J. Neubert, supt.; 236 met.; no gen.; pur. 2,256,343 kWh; rev. $110,595. 2

KASSON City of, 122 W. Main St., 55944, 507/634-7071, Keith Houston, util. supt.; 1,2[illegible]2 met., no gen.; pur. 11,025,600 kWh; rev. $518,211. (1937) 2

KEEWATIN Pub. Utils. 55753, 218/778-6544, Matt Draskovich, supvr.; 650 met.; no gen.; pur. 5,830,014 kWh; rev. $390,722. (1927) 2

KENYON Mun. Utils., 713 Second St., 55946, 507/789-6573, Lorry Wilie, supt.; 783 met.; gen. 1,921 kW eng., pur. 10,099,200 kWh; rev. $419,715. 2

LAKE CITY Utils., 205 West Center St., 55041, 612/345-5383, James Biggar, supt.; 2,046 met.; no gen.; pur. 51.5 million kWh; rev. $2,192,892. (1907) 1

LAKE CRYSTAL Pub. Util., 100 E. Robinson St., 56055, 507/726-2538, Alden Sutherland, mgr.; 900 met.; gen. 4,195 kW dual-fuel, eng., pur. 9,847,615 kWh; rev. $567,941. (1937) 2

LAKEFIELD Pub. Utils., 56150, 507/662-6363, Richard Thompson, 984 met.; gen. 2,066 kW gen. 2,066 kW eng.; sales 10,083,212 kWh; rev. $385,942. (1900) 2

LAKE PARK Pub. Utils., 56554, 218/238-5532, George Mattson, supt.; 302 met.; no gen.; pur. 2.7 million kWh; rev. $76,000.

LANESBORO Pub. Utils., Box 333, 55949, 507/467-3222, Larry Peterson, elec. oper.; 464 met., gen. 1,296 kW, 56,710 kWh; pur. 4.3 million kWh; rev. $214,589. (1902) 1

LE SUEUR Mun. Utils., 228 N. Main, 56058, 612/665-3338, Mervin Hentges, supt.; 1,785 met.; no gen. pur. 38,976,000 kWh; rev. $1,701,807. (1934) 2

LITCHFIELD Pub. Utils., 421 W. Third St., 55355, 612/693-3277 Dallas E. Nelson, supt.; 2,583 met.; gen. 11,120 kW, 3,000 kW coal, 3,980 kW oil-fired, 4,140 kW dual-fuel, 429,000 kWh; sales 71,190,773 kWh; rev. $2,154,231. (1890) 2

LUVERNE Mun. Utils., Box 348, 56156, 507/283-2388, Walter M. Johnson, admin.; 2,077 met.; gen. 7,422 kW, 3,000 kW steam, 4,422 kW eng.; sales 37,023,452 kWh; rev. $1,019,469. (1892) 2

MABEL, City of, 55954, 507/493-5299, Jimmy Narum, city clerk; 450 met.; no gen.; pur. 164,500 kWh; rev. $184,000. (1905) 2

MADELIA Mun. Light & Power, 24 Abbott Ave., S.W., 56062-0026, 507/642-8803, Steve Moses, supt.; 1,030 met.; gen. 8,296 dual-fuel kW eng., 141,000 kWh; pur. 21,157,663 kWh; rev. $942,041. (1939) 2

MADISON Mun. Utils., 404 Sixth Ave., 56256, 612/598-7922, Harold Hodge, supt.; 1,100 met.; pur. 17,205,250 kWh; rev. $619,561. (1898) 2

MARSHALL Mun. Utils., 113 S. Fourth St., 56258, 507/532-2213, F. Al Rome, gen. mgr.; 4,522 met.; gen. 26,500 kW, 3,000 kW oil, 3,500 kW oil-fired, 20,000 kW oil-turbine, 85,400 kWh; sales 129,344,226 kWh rev. $ 3,055,612. (1894) 2

MELROSE Pub. Utils., 225 First St. N.E., 56352, 612/256-4247, John J. Hinnenkamp, util. supt.; 1,170 met.; gen. 2,111 kW oil-fired, 6,000 kW dual-fuel, 65,000 kWh; pur. 3,463,948 kWh; rev. $1,049,538. (1905) 2

MOORHEAD Pub. Service Dept., 500 Center Ave., Box 779, 56560, 218/299-5400, Thomas H. McCauley, supt. 11,287 met.; gen. 44,000 kW, 34,000 kW coal, 10,000 kW oil, (comb-turb.) 21,600,000 kWh; pur. 261 million kWh; rev. $6,496,591. (1898) 2

MOOSE LAKE Water & Light Comm., Box 418, 55767, 218/485-4100, Warren G. Weske, supt.; 772 met.; gen. 4,100 dual-fuel kW eng., 58,230 kWh; pur. 12,000,629 kWh; rev. $766,539. (1932) 2

MORA Mun. Elec. Util., 16 N Lake St., 55051, 612/679-1451, Virgil C. Anderson, supt.; 1,516 met.; gen. 15,155 kW dual-fuel, 820,500 kWh; pur. 45,898,000 kWh; rev. $2,078,739. (1934) 2

MOUNTAIN IRON Water & Light, Box 505, 55768, 218/735-8267, Richard Anderson, supt.; 850 met.; no gen.; pur. 10,399,200 kWh; rev. $777,750. (1919) 2

MOUNTAIN LAKE Mun. Utils., 925 Second Ave., 56159, 507/427-2633, Charles Utley, supt.; 994 met.; gen. 5,442 kW eng., 15 million kWh; pur. none; rev. $494,000. (1935)

NASHWAUK Pub. Utils. Comm., 315 Third St., 55769, 218/885-2522, Louis E. Legueri, supt.; 601 met.; no gen.; pur. 6 million kWh; rev. $295,542. (1910) 1

NEWFOLDEN Elec. Dept., 56738, 218/874-5215, Martin Smeby, supt.; 213 met.; no gen.; rev. $60,000. 1

NEW PRAGUE Mun. Utils., 300 E. Main St., 56071, 612/758-4447, Donald E. Meyer, supt.; 1,371 met.; gen. 17,000 kW dual-fuel eng., pur. 41,180,000 kWh; rev. $2,103,361. (1928) 2

NEW ULM Pub. Utils., 310 First North St., 56073, 507/354-4182, H. M. Barck, supt.; 5,943 met.; gen. 21,000 kW coal, 6,000 kW gas, 24,000 kW comb. turbine; sales 112,929,214 kWh; rev. $5,980,778. (1910) 2

NIELSVILLE Utils., 56568, Darlene Ruthenberg, city clerk; 75 met.; no gen.; pur. 725,064 kWh; rev. $21,326. 2

NORTH BRANCH Water & Light, Box 176, 55056, 612/674-7100, Richard C. Anderson, supt.; 765 met.; gen. 2,365 kW dual-fuel eng.; sales 8,797,163 kWh; rev. $568,140. (1941) 2

NORTH ST. PAUL, 2526 E. 7th Ave., 55109, 612/770-4488, Ron Schuler, dir., elec. utils.; 5,079 met.; no gen.; pur. 52,422,488 kWh; rev. $2,514,118. (1900) 2

OLIVIA City of, 1009 W. Lincoln Ave., 56277, 812/523-2361, Leon O. Nemitz, supt.; of Light Dept.; 1,230 met.; no gen.; pur. 18,408,610 kWh; rev. $396,288. 2

ORTONVILLE Elec. Dept., 315 Madison Ave., 56278, 612/839-3428, Arthur Hamann, supt. of util.; 1,859 met.; no gen.; pur. 22,694,873 kWh; rev. $774,785. 2

OWATONNA Pub. Utils., 208 S. Walnut Ave., Box 800, 55060, 507/451-2480, David M. Martin, gen. mgr.; 7,945 met.; gen. 34,500 kW gas, 100,157,000 kWh; pur. 37,344,000 kWh; rev. $7,248,662. (1924) 2

PETERSON Elec. System, 55962, 507/875-2240, Bill Grindland Jr.; 125 met.; no gen.; pur. 1.5 million kWh; rev. $67,337. 2

PIERZ Elec. Dept., 56364, 612/468-6471, Harold M. Mayor, Elec. Comm., 523 met.; no gen.; pur. 5,734,500 kWh; rev. $288,775. 2

PRESTON Pub. Utils. Comm., 55965, 507/765-4541, Fred Nagel, elec. supt.; 747 met.; gen. 3,500 kW dual-fuel eng., 429,680 kWh; pur. 9.6 million kWh; rev. $468,585. (1896) 0

PRINCETON Pub. Utils. Comm., 907 1st St., 55371, [illegible]/389-2252, Harold R. Steppuhn, supt.; 1,589 met.; gen. 45,100 kW dual-fuel, pur. 26,648,000 kWh; rev. $1,241,953. (1938) 2

PROCTOR Pub. Utils. Comm., 210 Third St., 55810, 218/624-4055, Douglas G. Nelson, plant supt.; 1,315 met.; no gen.; sales 12,433,100 kWh; rev. $747,598. (1941) 2

RANDALL Mun. Util., City Hall, 56475, 612/749-2159, Larry Sharon, clerk; 240 met.; no gen.; pur. 2.6 million kWh; rev. $136,000. 2

REDWOOD FALLS Pub. Utils Comm., 333 S. Washington, Box 48, 56283, 507/637-5789, Curtis G. Weber, supt.; 2,727 met.; gen. 9,430 kW, 1,330 kW oil-fired, 7,800 kW dual-fuel, 300 kW hydro, 2,417,520 kWh; pur. 43,980,268 kWh; rev. $ 1,373,041. (1946) 2

ROCHESTER Pub. Utils., Box 6057, 55903, 507/285-8970, John A. Cobb, gen. mgr.; 26,081 met.; gen. 135,400 kW 98,400 kW coal, 35,000 kW oil (comb. turbine), 2,000 kW hydro, 436,221,000 kWh; pur. 116,345,000 kWh; rev. $23,143,140. (1892) 2

ROSEAU Mun. Utils., 100 Second Ave., Box 307, 56751, 218/463-2351, Dale Drown, supt.; 1,400 met.; gen. 3,150 kW oil-fired eng., 29,800 kWh; pur. 19,224,000 kWh; rev. $1,329,000. 2

ROUND LAKE City of, Box 72, 56167, 507/945-8127, Gary Jurgensen, supt.; 245 met.; no gen.; pur. 53,627,000 kWh; rev. $302,031. 2

RUSHFORD, City of, 205 South Elm St., 55971, 507/864-2444, Gordon R. Hatleli, supt. pub. works; 751 met.; no gen.; pur. 9 million kWh; rev. $427,385. 1

RUSHMORE Elec. Dept., 56168, 507/478-4352, Alpharetta Palaschak, city clerk; 204 met.; no gen.; rev. $36,000.

ST. CHARLES Light & Water Dept., 1242 Whitewater Ave., 55972, 507/932-3020, Gus Ihrke, Pub. wks, supt.; 1,087 met.; no gen.; pur. 14,271,200 kWh; $663,529. 2

ST. JAMES Public Utils., 120 Armstrong Blvd., S., 56081, 507/375-3121, ext. 22, Craig Christiansen, supt. of pub. wks.; 2,028 met.; no gen.; pur. 30.1 million kWh; rev. $830,791. 1

ST. PETER Mun. Utils., Box 299, 56082, 507/931-3540, James B. Sandeen, supt.; 2,903 met.; no gen.; sales 48,220,819 kWh; rev. $2,001,417. (1892) 2

SARGEANT Elec. Light Dept., 55973, 507/584-6886, Mrs. Herbert Martin, clerk; 35 met.; no gen.; sales 650,000 kWh; rev. $37,000. 2

SAUK CENTRE Water, Light & Power Comm., 101 S. Main St., 56378, 612/352-2300, Ernest Bryant, supt.; 1,649 met.; no gen.; sales 25,336,970 kWh; rev. $704,557. (1916) 2

SHAKOPEE Pub. Utils. Comm., 1030 E. Fourth Ave., 55379, 612/445-1988, Louis Van Hout, util. mgr.; 3,968 met.; no gen.; sales 68,060,000 kWh; rev. $2,860,000. (1900) 2

SHELLY Mun. Light Dept., Box 126, 56581, 218/886-8355, Manfried Folstead, city clerk; 148 met.; no gen.; pur. 2,292,400 kWh; rev. $66,138. 2

SLEEPY EYE Pub. Utils., 130 Second Ave., N.W., 56085, 507/794-4371, D. H. Logue, supt.; 1,655 met.; gen. 5,372 kW, 3,250 kW steam, 2,122 kW eng., pur. 21,975,144 kWh; rev. $1,099,937. (1890) 2

SPRINGFIELD Pub. Utils. Comm., 14 N. Marshall Ave., 56087, 507/723-5290, Menno Mennenga, supt.; 1,115 met.; gen. 7,000 kW coal, 1.6 million kWh; pur. 14.8 million kWh; rev. $927,500. (1894) 1

SPRING GROVE Mun. Util., 55974, 507/498-5221, Wesley Kjome, mgr.; 590 met.; no gen.; pur. 5.9 million kWh; rev. $18[illegible],000.

SPRING VALLEY Pub. Utils., 104 S. Section Ave., 55975, 507/346-7622, Robert G. Carson, supt.; 1,358 met.; gen. 8,376 kW; sales 14,173,843 kWh; rev. $828,042. (1935) 2

STAPLES Mun. Water & Light Dept., 611 Iowa Ave., 56479, 218/894-2441, Gerald Brever, city clerk, 1,500 met.; no gen.; pur. 18,016,100 kWh; rev. $722,564. 2

STEPHEN City of, Box 28, 56757, 218/478-3614, Leonard Bazey, supt.; 422 met.; no gen.; pur. 5,466,530 kWh; rev. $237,662. (1938) 2

THIEF RIVER FALLS Mun. Utils., Box 528, 56701, 218/681-5816, John T. Anderson, supt.; 3,964 met.; gen. 8,866 kW, 5,300 kW eng., 500 kW hydro, 3,066 other, 1,739,000 kWh; sales 73,884,000 kWh; rev. $2,437,454. (1901) 2

TRUMAN Mun. Light Plant, 118 N. First Ave., Box 147, 56088, 507/776-6501, Erhardt F. Grefe, mgr.; 630 met.; gen. 4,277 kW dual-fuel, 453,600 kWh; pur. 8,212,100 kWh; rev. $479,621. (1938) 2

TWO HARBORS City of, 610 Second Ave., 55616, 218/834-4386, John E. Turtle, city electrician; 1,704 met.; no gen.; rev. $995,647. (1905) 2

TYLER Mun. Light & Power Dept., Box 398, 56178, 507/247-3430, Edward L. Ericson, city admin.; 929 met.; gen. 1,154 kW eng., 8,390 kWh; pur. 3.9 million kWh; rev. $158,000.

VIRGINIA Dept. of Pub. Utils., 55792, 218/741-0740, Charles E. Fricke, supt.; 6,090 met.; gen. 35,000 kW steam, 73,380,000 kWh; sales 82,020,017 kWh; rev. $5,259,952. (1912 2

WADENA Light & Water Dept., 104 N. Jefferson, 56482, 218/631-1813, Russell F. Berg, supt.; 2,227 met.; no gen.; sales 39,723,131 kWh; rev. $1,212,310. (1897) 2

WARREN, City of, 126 W. Johnson Ave., 56762, 218/745-5343, Ralph H. Plencner, supt.; 943 met.; gen. 2,161 kW oil-fired, 11,700 kWh; sales 14,356,943 kWh; rev. $49,137,181. 2

WARROAD Light & Power, Box 50, 56763, 218/386-1454, Harold P. Olimb, city clerk; 570 met.; no gen.; pur. 15,426,000 kWh; rev. $540,000. 2

WASECA Water & Light, 508 S. State St., 56093, 507/835-3890, Mark Sather, city mgr.; 3,511 met.; no gen.; pur. 44.7 million kWh; rev. $1,831,279. (1894) 1

WELLS Pub. Utils., 101 First St., S.E., 56097, 507/553-3119; Ray Wigern, supt.; 1,305 met.; gen. 8,406 kW dual-fuel eng., 113,000 kWh; sales 14,810,925 kWh; rev. $840,580. (1894) 2

WESTBROOK Mun. Light & Power, Box 296, 56183, 507/274-6712, Dennis Jutting, supt.; 526 met.; no gen.; pur. 8,039,918 kWh; rev. $260,671. (1938) 2

WHALEN Electric Dept., 55986, 507/467-2326, Jerry Olson, mayor; 58 met.; no gen.; pur. 474,400 kWh. 2

WILLMAR Mun. Utils. Comm., 704 SW Litchfield Ave., 56201, 612/235-4422, C. Ted Nelson, gen. mgr.; 6,948 met.; gen. 29,350 kW coal, 77,544,400 kWh; sales 116,348,458 kWh; rev. $5,687,958. (1905) 2

WINDOM City of, 444-9th St., 56101, 507/831-3780, Dennis Purrington, elec. supt.; 2,128 met.; gen. 3,000 kW oil (diesel), 14,700 kWh, sales 31,402,245 kWh; rev. $976,907. (1915) 2

WINTHROP Mun. Utils., 106 1st St. E., 55396, 507/647-5308, Del Thompson, supt.; 750 met.; no gen.; pur. 13,798,600 kWh; rev. $436.886. 2

WORTHINGTON, City of, Pub. Utils., Box 111, 56187, 507/376-6131, Donald E. Habicht, dir. of utils.; 5,184 met.; gen. 14,000 kW oil; sales 42,798,838 kWh; rev. $3,258,751. (1895) 2

MISSISSIPPI

(Systems designated "TVA" are distributors of Tennessee Valley Authority power and purchase all of their power from TVA.)

ABERDEEN Pub. Utils., Box 817, 39730, 601/369-4731, Ralph T. Byars, mgr.; pur. 138,456,000 kWh. (TVA) (1939) 8

AMORY Elec. & Water Dept., Box 266, 38821, 601/256-5633, Billie B. Wright, mgr.; 3,710 met.; pur. 75,611,520 kWh; rev. $3,400,000. (TVA) (1934) 2

CANTON Mun. Utils., Box 114, 39046, 601/859-2921, John M. Wallace, gen. mgr.; 4,579 met.; no gen.; pur. 75.8 million kWh; rev. $3,094,985. (1896) 0

CENTREVILLE, 39631. (Town owns distribution system; leased to Mississippi Power & Light Co. until (1985.)

CLARKSDALE Water & Light Dept., Box 940, 38614, 601/627-4761, Lewis L. Wilkins, supt.; 7,976 met.; gen. 63,000 kW, 25,000 kW gas, 12,500 kW gas turbine, 25,500 comb. cycle, 73,407,500 million kWh; sales 130,771,790 kWh; rev. $8,068,154. (1900) 2

COLLINS, City of, Box 326, 39428, 601/765-4491, Mary K. Burnham, Clerk; 961 met.; sales 11,729,194; rev. $880,387. 2

COLUMBUS Light & Water Dept., Box 949, 39701, 601/328-6913, Reynolds R. Ridgley, gen. mgr.; 11,298 met.; pur. 188,516,579 kWh; rev. $13,801,000. (TVA) (1939). 2

DURANT Light & Water Plant, 101 E. Mulberry, Box 272, 39063, 601/653-3221, R. C. Umphers, supt.; 1,102 met.; no gen.; pur. 15,938,000 kWh; rev. $791,860. 2

FAYETTE Light & Water Plant, 36069. **(Leased to Mississippi Power & Light Co.)**

GREENWOOD Utils., 101 Wright Place, Box 866, 38930, 601/453-7234, C. M. Mathews, mgr.; 9,639 met.; gen. 64,900 kW, 53,650 kW steam, 11,250 kW gas turbine, 176.5 million kWh, pur. 13.1 million kWh; rev. $7,315,587. (1904) 0

HOLLY SPRINGS, City of, Util. Dept., Box 520, 38635, 601/252-4411, I. W. Carpenter, mgr.; 8,101 met.; sales 153,717,886 kWh; rev. $6,715,407. (TVA) (1890) 2

ITTA BENA Water & Light Dept., 38941, Charles Mitchell, supt.; 700 met.; no gen.

KOSCIUSKO Water & Light Plant, 204 West Jefferson St., 39090-3686, 601/289-1141, Charles E. Burchfield, supt.; 3,127 met.; no gen.; pur. 46,308,885 kWh; rev. $2,591,656. (1919) 2

LELAND Mun. Light and Water Division, 101 Deer Creek Drive, N.W., Dale Martin, mgr., 38756; no gen.

LOUISVILLE Elec. System, Box 71, 39339, 601/773-7147. Tommy Lee Kirkpatrick, mgr.; 3,453 met.; pur. 116,679,600 kWh; rev. $4,248,951. (TVA) (1939) 2

MACON Elec. Dept., Pulaski St., Box 146, 39341, 601/726-5251, H. L. Ledbetter, supt.; 1,216 met.; pur. 23,427,718 kWh; rev. $930,419. (TVA) (1927) 2

NEW ALBANY Water & Light Dept., 100 Cleveland St., Box 236, 38652, 601/534-5021, Harold G. Smith, mgr.; 7,700 met.; pur. 171,120,388 kWh; rev. $10,530,701. (TVA) (1934) 2

OKOLONA Elec. Dept., Box 111, 38860, 601/447-5482, Frank Westbrook, operating supt.; 3,772 met.; pur. 68.1 million kWh; rev. $1,889,509. (TVA) (1935)

OXFORD, City of, Elec. Dept., Box 827, 38655, 601/236-1310, Tom H. Landrum, supt.; 4,328 met.; sales 104,731,328 kWh; rev. $4,371,945. (TVA) (1896) 2

PHILADELPHIA Utils., Box 512, 39350, 601/656-1121, 3,275 met.; pur. 94,904,650 kWh; rev. $3,652,511. (TVA) (1939) 2

STARKVILLE Elec. Dept., Box 927, 39759, 601/323-3133, Clay R. Campbell, gen. mgr.; 6,966 met.; no gen.; pur. 210.7 million kWh; rev. $8,175,683. (TVA) (1939) 1

TUPELO, Water & Light Dept., Box 588, 38801, 601/842-1663, A. R. Aycock, mgr.; 11,670 met.; no gen.; pur. 411 million kWh; rev. $14,980,412. (TVA) (1900) 1

WATER VALLEY Elec. Dept., 38965, 601/473-2770, Vernon Chambers, supt.; 1,820 met.; pur. 48.7 million kWh; rev. $1,367,361. (TVA) (1938)

WEST POINT Elec. System, 331 Washington St., 39773, 601/494-2262, Dewell Brasher, supt.; 3,497 met.; pur. 108.2 million kWh; rev. $2,771,030. (TVA) (1940)

WOODVILLE Light, Water & Gas Plant, 39669. **(Leased to Mississippi Power & Light Co.)**

YAZOO CITY Pub. Service Comm., 125 W. Commercial St., 39194, 601/746-3741, C. E. Lingenfelder, mgr.; 5,727 met.; gen. 31,500 kW, 652 kW oil and 53,906 kW gas (steam turbine), 15,227 kW gas; 69,785,000 kWh; pur. 15,033,300 kWh; rev. $5,611,941. (1903) 2

MISSOURI

ALBANY Light & Water, 106 E. Clay, 64402, 816/726-3510, Gene Wilson, city admin.; 1,029 met.; gen. 4,165 kW oil-fired eng.; 325,000 kWh; pur. 13.2 million kWh; rev. $639,000. 2

BETHANY Mun. Water & Light, Box 344, 64425, Samuel C. Davis, elec. supt.

BUTLER Mun., 101 N. Lyons, 64730, 816/679-4013, Don Edmonds, supt., 2,600 met.; gen. 4,200 kW dual-fuel eng. rev. $1,493,140. 2

CABOOL City of, 618 Main St., 65689, 417/962-3136, Noah January, city admin.; 11,629 met.; pur 20,239,979 kWh; rev. $947.767. 2

CALIFORNIA Bd. of Pub. Wks., 103 E. Versailles, 65018, 314/796-4591, Bill J. Gilbert, supt.; 1,718 met.; no gen.; pur. 21,089,859 kWh; rev. $1,112,328. (1936) 2

CAMERON, City of, 205-09 N. Main, 64429, 816/632-2177, Willard Peterson; [illegible],191 met.; gen. 2,550 kW oil-fired eng.; 366,000 kWh; pur. 29,927,4[illegible]0 kWh; rev. $1,310,225. (1924) 2

CAMPBELL Mun. Light Dept., 202 W. Grand, 63933, J.P. Slankard, supt.

CARROLLTON Mun. Utils, 707 S. Main St., Box 460, 64633, 816/542-0360, L.L. Anderson, supt.; 2,448 met.; gen. 22,619 kW dual-fuel, 19,541,160 kWh; pur. 28,489,600 kWh; rev. $2,469,669. (1941) 2

CARTHAGE Water & Elec. Plant, Box [illegible]11, 64836, 417/358-5904, Howard A. Berry, PE, gen. supt.; 5,820 met.; gen. 34,000 kW dual-fuel, 17,950,061 kWh; rev. $4,720,326. (1898) 2

CENTRALIA Power & Light, 114 S. Rolins St., 65240, 314/682-5658, William D. Goldsberry, supt.; 1,712 met.; no gen.; rev. $997,000. 2

CHILLICOTHE Mun. Utils, 715 Washington St., Box 807, 64601, 816/646-1664, Keith D. Beardmore, gen. mgr.; 4,643 met.; gen. 12,000 kW coal, 21,233,000 kWh; sales 74,634,655 kWh; rev. $3,677,805. (1911) 2

CLARKSVILLE Utils., 111 Howard, Box 528, 63336, 314/242-3553. Kenneth Shuford, supt.; 356 met.; no gen.; pur. 3,616,615; rev. $210,058. (1939) 2

COLUMBIA, City of, Water & Elec. Util., Box N, 65205, 314/874-7325, Richard E. Malon, dir.; 20,688 met.; gen 38,500 kW coal, 35,000 kW gas, 12,500 gas-fired, 121,426,616 kWh; sales 463,951,879 kWh; rev. $22,632,740. (1904) 2

CRANE City of, 120 N. Commerce, Box 17, 65633, 417/723-5990, Jack Swearingen, dir. pub. works, 625 met.; no gen.; pur. 9,016,000 kWh; rev. $498,822. (1963) 2

CUBA Mun. Utils, 65453, 314/885-7958, Paul D. Dickens, supt. 2

EL DORADO SPRINGS Bd. of Pub. Wks., 127 W. Spring, 64744, 417/876-2145, Jim Grisham, city supt.;1,943 met.; no gen.; pur. 30,086,400 kWh; rev. $1,164,235. (1939) 2

FARMINGTON Light & Power, 110 W. Columbia, 63640, 314/756-2620, Ronald W. Sheppard, supt.; 3,652 met.; no gen.; pur. 53,673,000 kWh; rev. $2,222,006. (1900) 2

FAYETTE Water & Light Dept., 117 S. Main St., 65248, 816/248-2214, Frank Mansfield, supt.; 1,200 met.; gen. 3,661 kW eng.

FREDERICKTOWN City Light & Power, 120 W. Main, 63645, 314/783-2154, Owen J. Slinkard, mgr.; 2,004 met.; no gen.; pur. 27,662,964 kWh; rev. $1,194,919. (1948) 2

FULTON Lighting & Power System, Box 142, 65251, 314/642-6655, J.E. Bates, gen. supt.; 4,169 met.; gen. 32,550 kW, 18,000 kW gas turbine, 14,550 kW dual-fuel, 50.4 million kWh; pur. 48.5 million kWh; rev. $3,954,605. (1895) 1

GALLATIN Mun. Light & Water Works, Box 336, 64640, 816/663-3331, C.R. Bashford, supt. utils.; 1,000 met.; gen. 1,800 kW eng., 350,000 kWh; pur. 14 million kWh; rev. $582,000. 1

GALT Mun. Utils., Rt. 2, Box 112A, 64641, 816/673-6514, Arnold Werteen, supt.; 180 met.; no gen.; pur. 2,129,200 kWh, rev. $116,026. 2

GILMAN CITY Power & Light Plant, 64642, Earl Crump, supt.

HANNIBAL, City of, Bd. of Pub. Works, City Hall, 63401, 314/221-8050, Owen Ransdell, gen. supt.; 8,322 met.; sales 130,178,611 kWh; rev. $5,902,423. (1886) 2

HARRISONVILLE Mun. Utils., 64701, 816/884-3285, Don Gragg, dir., pub. wrks.; 2,757 met.; pur. 42.8 million kWh; rev. $1,858,629. (1929) 1

HERMANN Mun. Utils., 312 Schiller St., 65041, 314/486-5953, Linford H. Thornton, supt.; 1,438 met.; no gen.; pur. 29,911,000 kWh; rev. $1,192,677. (1953) 2

HIGGINSVILLE Mun. Utils., Box 110, 64037, 816/584-2106, Russell Ellis, supt. of utilities; 2,129 met.; gen. 2,530 kW eng., 2,410 kW dual-fuel; 365,000 kWh; sales 31,479,791 kWh; rev. $1,905,171. (1893) 2

HOUSTON, City of, Elec. Dept. 111 W. Main St., 65483, 417/967-3653, J.P. McDonald, city admin.; 1,075 met.; no gen.; pur. 22,603,200 kWh.; rev. $909,035. (1951). 2

HUNNEWELL Elec. Dept., 63443, 314/983-2276, Bert Hooper, supt.; 170 met.; no gen.; (1915) 2

INDEPENDENCE Power & Light Dept., 21500 E. Truman Road, 64056, 816/796-4400, P.F. Banks, elec. util. dir.; 44548 met.; gen. 262,000 kW, 99,000 kW coal, 68,000 kW oil, 95,000 kW gas; 588,421,900 kWh; sales 618,489,532 kWh; rev. $32,133,054. (1901) 2

JACKSON City of, 225 S. High St., 63755, 314/243-3568, Carl L. Talley, city adm.; 4,000 met.; gen. 1,700 kW oil-fired eng., 17,300 kW dual-fuel; pur. 62,988,000 kWh; rev. $2,294,300. 2

KAHOKA Water & Light Dept., 255 N. Washington, 63445, 816/727-2512, Delbert Gilbert, supt.; 1,000 met.; gen. 39.5 kW dual-fuel, 1,550,000 kWh; pur. 10,323,200 kWh; rev. $616,069. 2

KENNETT Bd. of Pub. Wks., Box 40, 63857, 314/888-2835, Larry V. Jones, supt. of utils.; 5,000 met.; gen. 31,906 kW dual-fuel, 7.4 million kWh; pur. 91.8 million kWh; rev. $3,000,000. (1942) 1

KIRKWOOD City of, 212 S. Taylor Ave., 63122, 314/822-5847, Bob R. Carter, supt.; 10,045 met.; no gen.; pur. 142,000,000 kWh; rev. $6,450,000. (1900) 2

LAMAR Light and Water Co., 1100 Broadway, 64759. 417/682-5554, J.A. Roberts, city supt.; 2,118 met.; no gen.; sales 33,730,094 kWh; rev. $1,131,195. (1900) 2

LA PLATA Mun. Power and Light, 63549, 816/332-7212, Gayle Perry, supt.; 800 met.; gen. 1,800 kW eng., 122,800 kWh; pur. 7,170,197 kWh. (1938) 2

LEBANON Light & Water Dept., 210 Van Buren St., Box 111, 65536, 417/532-2157, Bill Lawson, supt.; 3,600 met.; no gen.

LIBERAL Mun. Light & Water, 64762, 417/843-2135, Neil M. Mooney, supt.; 350 met.; no gen.; pur. 4.3 million kWh; rev. $189,366. (1935) 2

LOCKWOOD Light & Water, Box O, 65682, 417/232-4221, Wayne Shorter Jr., city supt.; 540 met.; no gen.; pur. 4.2 million kWh; rev. $86,446.

MACON Mun. Utils., 121-123 W. Bourke St., Box 569, 63552, 816/385-3173, Paul E. Jensen, gen. supt.; 2,633 met.; gen. 11,700 kW oil-fired, 2.3 million kWh; pur. 53.5 million kWh; rev. $2,306,770. (1890) 1

MALDEN Bd. of Pub. Wks., 111 E. LacLede, 63863, 314/276-2238, Wm. Ray Lyons, gen. mgr.; 2,609 met.; gen. 13,800 kW dual-fuel, 45,616,901 kWh; pur. 50,578,545 kWh; rev. $1,718,364. (1952) 2

MANSFIELD City of, 65704, 417/924-3719, Kenneth Cowell, city supvr.; 625 met.; no gen. (1963) 2

MARCELINE Mun. Utils., 116 N. Kansas Ave., 64658, 816/376-3528, Robert Engelhard, supt.; 1,350 met.; no gen.; pur. 21,412,800 kWh, rev. $1,162,301. 2

MARSHALL Mun. Utils. (Bd. of Pub. Wks.), 74 E. Arrow St., 65340, 816/886-6966, Thomas F. Hill, gen. supt.; 5,460 met.; gen. 22,000 kW coal, 26,000 kW gas, 15,000 kW gas turbine, pur. 30 million kWh; rev. $5,919,530. (1920) 1

MEMPHIS Mun. Light Plant, 135 S. Main, 63555, 816/465-2003, Paul C. Luscombe, supt.; 1,298 met.; gen. 3,071 kW oil-fired eng; 3,410 kW dual-fuel eng.; 440,400 kWh; pur. 13,011,200 kWh; rev. $747,172. (1919) 2

MILAN City of, 201 N. Market, Box 247, 63556, 816/265-4411, Edward Sayre, supt.; 965 met.; no gen.; sales 18,324,000 kWh, rev. $916,335. 2

MINDENMINES Mun. Light Dept., Box 115, 64769, 417/842-3216, Freddie Lee, supt.; 170 met.; no gen.; pur. 1,191,300 kWh; rev. $65,425. (1922) 2

MONETT City of, 217 5th St., Box 110, 65708, 417/235-3300, Harlan C. Barekman, supt.; 3,083 met.; no gen.; sales 70,809,797 kWh; rev. $2,727,951. (1908) 2

MONROE CITY City of, Elec. Prod., 300 N. Main, 63456, 314/735-4585, John G. Saunders, gen. supt. of utils.; 1,245 met.; gen. 8,000 kW dual-fuel, 700 oil-fired eng. 1,340,600 kWh; pur. 27,825,620 KWh; rev. $1,116,069. (1902) 2

MOUNT VERNON City of, 319 E. Dallas, 65712, Jack Swearington, supt.; 417/466-2122; 1,637 met.; no gen.; sales 20,045,085 kWh; rev. $859,276. 2

NEW MADRID Mun. Light & Power, 560 Mott St., 63869, Don Lloyd, city adm.; 314/748-2458; 1,610 met.; gen. 4,800 kW; sales 24,528,741 kWh; rev. $848,439. (1938) 2

NIXA City of, Bd. of Pub. Wks., 106 E. Mt. Vernon, 65714, 417/725-3229, Fred Vandekerkhove, bd. chair.; 1090 met., no gen.; pur. 14.9 million kWh; rev. $410,901. (1967) 1

ODESSA Mun. Power Plant, 9th & Dryden, 64076, 816/633-5521, Ron Delay, supt.; 1,277 met.; gen. 7,835 kW eng.; 1,625,000 kWh; sales 22,518,360 kWh; rev. $1,068,463. 2

OSCEOLA City Mun. Utils., Box 321, 64776, 417/646-8421, Richard J. Reed, supt., 316 met.; no gen.; pur. 3.5 million kWh; rev. $134,486. (1971)

OWENSVILLE City of, Mun. Utils., 109 N. 2nd, 65066, 314/437-2514, Roy Bizzle, supt.; 1,100 met.; gen. 2,110 kW diesel; rev. $880,000. 2

PALMYRA Mun. Utils., 301 S. Main, 63461, 314/769-2224, William D. Huffman, gen. supt.; 1,673 met.; gen. 1,000 kW oil-fired eng.; 5,370 kW dual-fuel eng.; 2,063,500 kWh; pur. 16,685,400 kWh; rev. $1,016,029. (1912) 2

PARIS City of, 124 W. Caldwell St., 65275, 816/327-4334, Ralph Jett, Supt.; 801 met.; no gen.; pur. 9,980,693 kWh; rev. $462,673. (1900) 2

PATTONSBURG Mun. Light Plant, 64670, Irvin Eberle, supt.

PERRY Pub. Utils., 63462, 314/565-3131, Ernst E. Elliott, supt.; 400 met.; no gen.; pur. 1.7 million kWh; rev. $78,685.

PLEASANT HILL Mun. Utils., 203 Paul St., 64080, 816/987-2245, Jerry Barbarick, supt.; 1,350 met.; gen. 9,276 kW eng., 11.6 million kWh; pur. none; rev. $319,472.

POPLAR BLUFF City of, Light and Water Sewer Depts., 301 S. Main St., 63901, 314/785-5749, Cecil R. Johnson, mgr.; 7,832 met.; gen. 14,000 kW dual-fuel, 2,429,360 kWh; pur. 164,617,829 kWh; rev. $4,641,583. (1916) 2

RICH HILL Mun. Elec. Plant, Seventh and Walnut Sts., 64779, 417/395-4211, Billy Gene Heckadon, supt.; 925 met.; gen. 1,100 kW eng., 3,610 kWh; pur. 4.6 million kWh; rev. $107,057. (1913)

RICHLAND Mun. Utils., Box 798, 65556, 314/745-3532, John Starmer, supt., 927 met.; no gen.; sales 9,570,328 kWh; rev. $476,384. (1946) 2

ROCKPORT Bd. of Pub. Wks., 201 W. Clay St., 64482, 816/744-2676, E.R. Bunn, supt.; 750 met.; gen. 5,894 kW eng., 10 million kWh; pur. 6 million kWh; rev. $250,000. (1932)

ROLLA Mun. Utils., Box 767, 65401, 314/364-1572, James W. Banse, gen. mgr.; 5,263 met.; no gen.; pur. 139.3 million kWh; ;rev. $4,897,560. (1945) 1

ST. JAMES Mun. Utils., 105 N. Jefferson St., Box 426, 65559, 314/265-3282, Kenneth Young, acting supt.; 1,100 met.; no gen.; pur. 7.5 million kWh; rev. $172,309.

ST. ROBERT City of, Elec. Utils., Box 826, 65583, 314/336-3911, Jack Fincher, util. supt.; 875 met.; no gen.; pur. 19,382,613 kWh; rev. $593,273. (1963) 2

SALEM City of, Mun. Light & Power, 3rd & Washington Sts., 65560, 314/729-4117, Jeanne Hollingshead, supvr. util. dept.; 2,485 met.; no gen.; pur. 31,564,500 kWh; rev. $1,500,000. (1907) 2

SALISBURY Mun. Utils., 128 W. 2nd St., 65281, 816/388-6197, Gerald Feller, supt.; 1,264 met.; no gen.; pur. 12,000,000 kWh; rev. $960,000. 2

SHELBINA City of, 63468, 314/588-4104, G.N. Rainey, supt.; 1,135 met.; gen. 3,000 kW dual-fuel, 16,760,000 kWh; pur. 16,512,000 kWh; rev. $910,000. 2

SIKESTON Bd. of Mun. Utils., Box 370, 63801, 314/471-3328, E.R. Inman, util. dir.; 7,672 met.; gen. 250,300, 241,000 kW coal, 4,300 kW oil-fired, 5,000 kW dual-fuel, 38,092,288 kWh; sales 337,927,799 million kWh; rev. $17,065,832. (1931) 2

SLATER City of, 109 N. Main St., 65349, 816/529-2271, Zack Zoul, city mgr.; 1,260 met.; no gen.; pur. 10,769,154 kWh; rev. $785,848. 2

SPRINGFIELD City Utils., 301 E. Central St., Box 551, 65803, 417/831-8311, Charles Courtney, acting gen. mgr.; 62,281 met., gen. 462,000 kW, 447,000 kW coal, 15,000 kW oil turbine, 1,650,556,000 kWh; sales 1,472,175,131 kWh; rev. $63,427,768. (1945) 3

STANBERRY Dept. of Light, Gas & Water, First & Locust St., 64489, 816/783-2725, Sam W. Hatheway, supt., bd. of pub. wks.; 700 met.; gen. 5,108 kW, 226,[illegible]0 kWh; pur. 7,430,000 kWh; rev [illegible] 419,254. (1937) 2

STEELVILLE Mun. Utils., 65565, 314/775-2815, Virgil L. Robinson, city engr.; 780 met.; no gen.; pur. 6 million kWh; rev. $288,000.

SULLIVAN Mun. Util., 305 N. Park St., 63080, 314/468-4712, Joseph Thurmond; 2,500 met.; no gen.; pur. 52,749,600 kWh; rev. $2,151,812. (1942). 2

THAYER City of, Second and Market St., 65574, 417/264-3921, Ira Goans, supt.; 855 met.; no gen.; rev. $435,941. 2

TRENTON Mun. Utils., Box 108, 64683, 816/359-2281, Gary Whorton, supt.; 3,159 met.; gen. 16,624 kW oil-fired eng., 2,375 kW dual-fuel, 3,187,200 kWh; sales 50,439,734 kWh; rev. $2,689,306. (1937) 2

UNIONVILLE Light & Power, 1611 Grant St., 63565, 816/947-2168, Dennie Sheehan, supt.; 1,370 met.; gen. 3,940 kW oil-fired, 2,910 kW dual-fuel, 1.6 million kWh, pur. 12 million kWh; rev. $769,000. (1921) 1

VANDALIA City of, Bd. of Pub. Wks., 202 E. Park St., 63382, 314/594-3302, Ray Callahan, supt.; 1,626 met.; gen. 4,000 kW oil, 3,000 kW dual-fuel; pur. 13,000,000 kWh; rev. $715,548. (1938) 2

WAYNESVILLE Mun. Elec. Util., 201½ North St., 65583, 314/774-6823,Tom Tinsley, supt.; 1,321 met.; no gen.; sales 16,704,189 kWh; rev. $789,764. (1963) 2

WEST PLAINS City Utils., 1910 Holiday Lane, Box 710, 65775, 417/256-4242, Lowell B. Patterson, city engr.; 3.500 met.; no gen.; pur. 37 million kWh; rev. $601,968. 1

MONTANA

LIVINGSTON City of, 414 E. Callendar St., 59047, 406/222-6120, ext. 203, Ed Stern, dir.; (mun. wind generation begun during 1982).

NEBRASKA

ALLIANCE Mun. Elec. System, Drawer D, 69301, 308/762-5400, R. A. Placek, city mgr.; 5,950 met.; gen. 7,500 kW coal and/or gas, pur. 89,581,708 kWh; rev. $3,963,845. (1916) 2

ANSLEY Mun. Light Plant, 68814, Richard Amsberry, supt.; 330 met.; gen. 1,600 kW dual-fuel eng.; 200 kW oil-fired eng.; 192,900 kWh; pur. 3,209,154 kWh; rev. $193,541. (1914) 2

ARAPAHOE Light & Water, Box 235, 68922, 308/962-7414, Wesley F. Smith, util. supt.; 620 met.; no gen.; pur. 6.8 million kWh; rev. $360,916. 1

ARNOLD Light & Water Plant, Box 35, 69120, 308/848-2228, Arleigh Kincaid, City Admr., 650 met.; gen. 1,120 kW oil-fired eng.; 35,000 kWh; pur. 5.8 million kWh; rev. $206,000. (1937) 2

AUBURN, Bd. of Pub. Works, 1600 O St., Box 288, 68305, 402/274-4981, Lambert K. Blecha, gen. mgr.; 2,652 met.; gen. 9 kW eng; 2,336,600 kWh; sales 36,560,436 kWh; rev. $1,564,344. (1939) 2

BARTLEY Elec. Dept., Box 53, 69020, 308/692-3340, Melvin Meguire, mgr.; 200 met.; no gen.; pur. 1.3 million kWh. 2

BATTLE CREEK Mun. Light & Power Dept., Box 280, 68715, 402/675-2165, Donald Beal, light comm.; 596 met.; no gen.; pur 7,831,680 kWh; rev. $361,882. 2

BAYARD Mun. Utils., Box 160, 69334, 308/586-1121, L. G. Sanchez, supt.; 650 met.; no gen.; pur. 12,210,000 kWh.; rev. $310,116. 2

BEATRICE Bd. of Pub. Works, 205 N. 4th St., Box 279, 68310, 402/223-5211, James Bauer, gen. mgr.; 6,536 met.; no gen.; pur. 99,618,324 kWh, rev. $4,044,247. (1947) 2

BEAVER CITY Power Plant, 68926, 308/268-2125, Farrel Bates, supt.; 458 met.; gen. 280 kW oil-fired, 1,600 kW dual-fuel, 39,900 kWh; sales 28,945,000 kWh; rev. $208,584. (1920) 2

BENKELMAN Mun. Water & Light Plant, 69021, 308/423-2765, Bill Seybold, plant supt.; 625 met.; gen. 1,300 kW eng.; pur. 8,188,387 kWh; rev. $402,467. 2

BLAIR Utils., 218 S. 16th St., 68008, 402/426-4191, Raymond D. Fisher, dir. pub. works; 2,915 met.; gen. 14,190 kW dual-fuel, 498,470 kWh; sales 41,256,913 kWh, rev. $1,748,214. (1916) 2

BLUE HILL Utils. Plant, Box 277, 68930, 402/756-2056, Royal Roskilly, supt.; 500 met.; gen. 1,300 kW dual-fuel eng.; pur. 5,291,797 kWh; rev. $169,361. (1904) 2

BRADSHAW, Box 155, 68319, 402/736-4634 B. J. Bartels, util. supt.; 200 met.; no gen.; pur. 2,900,000 kWh. 2

BRAINARD Elec. Dept., 68626, Larry Foral, supt.; 260 met.; no gen.; pur. 1 million kWh.

BRIDGEPORT Dept. of Utils., Box 280, 69336, Charles E. Brandt Jr., supt.; 761 met.; no gen.; pur. 3.3 million kWh.

BROKEN BOW Utils., Box 504, 68822, 308/872-6884, Jim Piester, mgr.; 2,200 met.; gen. 8,718 kW eng., 6.1 million kWh; pur. 26.7 million kWh; rev. $1,028,606. (1946)

BURT COUNTY PUBLIC POWER DISTRICT, Box 209, Tekamah, 68061, 402/374-2631, Jesse A. Rogers, mgr.; 3,999 met.; no gen.; pur. 84,447,548 kWh; rev. $3,550,965. (1935) 2

BURWELL Mun. Utils., 8th & H Sts., 68823, Jerry Hughes, supt.; 750 met.; gen. 10,000 kW eng., 450,000 kWh; pur. 7 million kWh, rev. $405,000. (1922) 2

BUTLER COUNTY RURAL PUBLIC POWER DISTRICT, Box 349, David City, 68632, 402/367-3081, Richard S. Polak, gen. mgr.; 3,806 met.; no gen.; pur. 62,850,590 kWh; rev. $2,743,591. (1937) 2

CALLAWAY Mun. Light, P.O. Box 157, 68825, 308/836-2262, Larry Nelson, supt.; 375 met.; gen. 900 kW oil-fired eng.; 2,200 kWh; pur. 4,222,723 kWh; rev. $138,542. (1912) 2

CAMBRIDGE Mun. Light, Water & Ice Works, Box 297, 69022, 308/836-2262, Ken Fichtner, supt.;4,439 met.; gen. 3,315 kW eng.

CAMPBELL Mun. Elec. Dept., Box 215, 68932, 402/756-8111, Greg L'Heureux, supt.; 250 met.; gen. 200 kW eng. (1909) 2

CEDAR-KNOX PUBLIC POWER DISTRICT, Box 397, Hartington, 68739, 402/254-6291, Harold M Martindale, gen. mgr.; 4,248 met.; no gen.; pur. 93,830,274 kWh; rev. $3,998,786. (1937) 2

CENTRAL CITY Elec. Dept., Box 418, 68826, 308/946-2771, Loyal Ruhl, supt.; 1,600 met.; no gen.; pur. 21,513,982 kWh; rev. $959,314 (1909) 2

CENTRAL NEBRASKA PUBLIC POWER & IRRIGATION DISTRICT (THE), Box 356, Holdrege, 68949, 308/995-8601, Frank J. Dragoun, gen. mgr.; 4 met.; gen. 154,000 kW; 320,771,176 kWh; sales 320,800,000; rev. $8,470,000. (Sells power output to Nebraska Public Power District.) (1933) 2

CHAPPELL Mun. Utils., 757 2nd St., 69129, 308/874-2401, Gordon Adkins, supt.; 736 met.; no gen.; pur. 8,793,800 kWh; rev. $465,346. (1911) 2

CHESTER, Village of, Box 335, 68327, 402/324-5755, Perry James, supt.; 252 met.; no gen.; pur. 2,570,823 kWh; rev. $124,965. (1920) 2

CHIMNEY ROCK PUBLIC POWER DISTRICT, Box 608, Bayard, 69334, 308/586-1824, Jim Reiber, mgr.; 2,200 met.; no gen.; pur. 36,274,213 kWh; rev. $1,861,079. 2

CLARKSON, City of, Elec. Dept., Box 18, 68629, 402/892-3100, Adolph Humlicek, util. supt.; 478 met.; no gen.; pur. 5,773,200 kWh; rev. $212,200. (1898) 2

CORNHUSKER PUBLIC POWER DISTRICT, Highway 81 N.W., Box 9, Columbus, 68601, 402/564-2821, Norman L. Hoge, gen. mgr.; 7,802 met.; no gen.; pur. 152,731,708 kWh; rev. $7,116,945. (1942) 2

COZAD Bd. of Pub. Wks., 211 W. 8th St., Box 65, 69130, 308/784-2090, Jim Morton, city admin., 1,877 met.; no gen.; pur. 48,719,430 kWh; rev. $1,959,971. (1939) 2

CRETE, City of, Elec. Dept., City Hall, 243 E. 13th St., 68333, 402/826-4311, George G. Beyer, Mgr., 2,261 met.; sales 71,498,531, rev. $3,401,174. 2

CUMING COUNTY PUBLIC POWER DISTRICT, 500 S. Main St., Box 67, West Point, 68788, 402/372-2463, Thomas A. Thomas, gen. mgr.; 2,772 met.; no gen.; pur. 84,041,020 kWh; rev. $3,887,685 (1936) 2

CURTIS Light & Water, 308 Center Ave., Box 6, 69025, 308/367-4122, E. Thomas Spaunaugle, City Clerk; 744 met.; no gen.; pur. 9,128,979 kWh; rev. $481,724. (1913) 2

CUSTER PUBLIC POWER DISTRICT, 625 E. South St., Box 10, Broken Bow, 68822, 308/872-2451, John H. Evans, mgr.; 7,943 met.; no gen.; pur. 103,801,842 kWh; rev. $5,263,468. (1943) 2

DAKOTA CITY, City of, Box 482, 68731, 402/987-3331, Don McKinney, city admin.; 520 met.; no gen.; pur. 9,498,720 kWh; rev. $341,740. (1910) 2

DAVENPORT Water & Light, 68335, Charley E. DeVore, util. supt.; no gen.

DAVID CITY Light & Water, 402 5th St., 68632, 402/367-3135, Gene Grubaugh, supt.; 1,298 met.; gen. 5,000 kW eng., 3.5 million kWh: pur. 15.9 million kWh; rev. $831,162. (1913) 1

DAWSON COUNTY PUBLIC POWER DISTRICT, 300 S. Washington St., Box 777, Lexington, 68850, 308/324-2386, Philip E. Darby Jr., mgr.; 14,636 met.; no gen.; pur. 226,911,802 kWh; rev. $10,653,228. (1937) 2

DESHLER Mun. Utils., 68340, 402/365-4260, R. G. Koerwitz, supt.; 510 met.; no gen.; rev. $308,270. 2

DE WITT Mun. Light & Power Plant, Box 208, 68341, 402/683-5025, Charles McDougall, mgr.; 360 met.; no gen.; pur. 14,045,768 kWh; rev. $519,000. 2

DORCHESTER Light Plant, Box 287, 68343, 402/946-3201, Leroy A. Vyhnalek, supt.; 300 met.; no gen.; pur. 4 million kWh; rev. $170,000. 2

DOUGLAS, Village of, 68344, 402/799-2330, Donald Smith, supt.; 110 met.; no gen.; pur. 109,080 kWh; rev. $58,550. (1926) 2

EDGAR, City of, Box 485, 68935, 402/224-5145, Robert Mitchell, util. supt.; 385 met.; no gen; pur. 5,047,891 kWh; rev. $188,173. 2

ELK CREEK Light & Water Dept., 68348, 402/877-2105, A. J. Damm, util., supt.; 85 met.; no gen.; rev. $36,000. (1920) 2

ELKHORN RURAL PUBLIC POWER DISTRICT, Box 310, Battle Creek, 68715, 402/675-2185, Milton Smith, mgr.; 6,161 met.; no gen.; pur. 100,668,244 kWh; rev. $4,564,769 (1939) 2

EMERSON Mun. Light & Power Plant, Box 336, 68733, 402/695-2554, David Gradert, elec. supt.; 1,900 kW steam and eng.; 1,957,700 kWh; pur. 2,633,600 kWh; rev. $258,943. (1912) 2

ENDICOTT Elec. Dept., 68350, Clyde Keiine, clerk; 66 met.; no gen.

FAIRBURY Light & Water, 612 D St., 68352, 402/729-3030, Glen R. Beachler, supt.; 3,400 met.; no gen. (19,500 kW oil-nat. gas standby); 21,000 kW steam, 53,491,000 kWh; rev. $2,149,500. (1910) 2

FAIRMONT Mun. Light & Water Works, Box 156, 68354, Russell Snodgrass, supt.; no gen.

FALLS CITY Util. Dept., 1820 Towle St., 68355, 402/245-2741, Daryl Stockburger, util. supt.; 2,764 met.; gen. 16,116 kW dual-fuel (diesel), 22.9 million kWh; pur. 20.2 million kWh; rev. $1,671,069. (1890) 1

FILLEY Utils., 68357, 402/662-3555, Harold Huls and David Norten, light commissioners; 100 met.; no gen.; pur. 782,100 kWh; rev. $46,779. 2

FRANKLIN Water & Light Comm., 619-15th Ave., 68939, 308/425-6217, Jerry Remaly, supt.; 650 met.; gen. 4,080 kW eng.

FRANKLIN COUNTY RURAL PUBLIC POWER DISTRICT, 101 16th Ave., Box 246, Franklin, 68939, 308/425-6217, Arnold Esplund, mgr.; 1,793 met.; no gen.; pur. 19,705,005 kWh; rev. $1,141,864. (1947) 2

FREMONT, City of, Dept. of Utils., 725 N. Park Ave., 68025, 402/721-2490, Jon K. McCafferty, gen. mgr.; 11,943 met.; gen. 136,000 kW coal, 308,172,000 kWh; sales 275,878,000 kWh; rev. $13,310,887. (1895) 2

FRIEND, City of, 235 Maple St., 68359, 402/947-5251, Robert Moore, supt. of utils.; 650 met.; no gen.; pur. 7,160,000 kWh. rev. $347,000. 2

GERING City of, 1450 10th St., 69341, 308/436-5096, Michael E. Solomon, city adm.; 3,304 met.; no gen.; pur. 63,185,702 kWh; rev. $1,821,445. (1934) 2

GILTNER Light & Water Dept., Box 254, 68841, Tom Lambert, light comm.; no gen.

GOTHENBURG, City of, 490 9th St., 69138, 308/537-3668, M. A. Rishel, mayor; Stan Hite, elec. foreman; 1,500 met.; no gen.; pur. 32.7 million kWh; rev. $1,000,000. (1955) 0

GRAND ISLAND Elec. Dept., Box 1968, 68802-1968, 308/381-5487, Robert J. Olson, dir. util.; 17,742 met.; gen 119,300 kW, 104,500 kW coal, 14,800 kW gas turbine, 123,809,990 kWh; sales 314,551,951 kWh; rev. $18,394,425. (1905) 2

GREENWOOD Light & Water, Box 86, 402/789-2300, Edwin D. Koehler, util. supt.; 225 met.; no gen.; pur. 2,659,500 kWh; rev. $117,642. 2

HAMPTON Elec. Dept., Box 277, 68843, 402/725-3186, Donald Smith, supt.; 246 met.; no gen.; pur. 3,066,732 million kWh; rev. $104,763. (1905) 2

HASTINGS Utils., 1228 N. Denver, Box 289, 68901, 402/463-1371, L.V. Blocker, mgr. of utils.; 11,155 met.; gen. 128,500 kW, 70,000 kW coal steam, 38,500 kW gas steam, 114,244,917 kWh; pur. 67,654,270 kWh; rev. $10,682,345. (1901) 2

HEBRON Elec. Dept., 216 Lincoln Ave., 68370, 402/768-6322; Roger Downs, util. supt., 950 met.; no gen.; pur. 13.5 million kWh; rev. $550,000. 2

HEMINGFORD Mun. Utils., Box 395, 69348, 308/487-3465 Jesus Gonzales, supt.; 585 met.; no gen.; pur. 6,063,143 kWh; rev. $275,731. (1956) 2

HENRY Utils., Box 76, 69349, Michael Summey, supt.; 50 met.; no gen. pur. 600,000 kWh.

HICKMAN, Elec. Dept., Box 127, 115 Locust, 68372, 402/792-2212, Leon Ten Hulzen, supt.; 350 met., no gen.; pur 4,786,721 kWh; rev. $227,828. 2

HILDRETH Utils., Box 217, 68947, Dale Casper, supt.; 218 met.; no gen.; pur. 1.1 million kWh; rev. $26,802.

HOLBROOK Mun. Light & Power Plant, Box 148, 68948, 308/493-5448, Don Vonderfecht, supt.; 197 met.; gen. 120 kW eng.; pur. 864,000 kWh; rev. $24,104.

HOLDREGE, City of, Util. Sys., Box 436, 68949, 308/995-8681, Marvin Paulsen, utils. supt.; 3,006 met.; no gen.; sales 83,050,291 kWh; rev. $3,002,376. (1919) 2

HOWARD GREELEY RURAL PUBLIC POWER DISTRICT, 422 Howard Ave., Box 105, St. Paul, 68873, 308/754-4457, Roy L. Olsen, mgr.; 2,678 met.; no gen.; pur. 52,181,291 kWh; rev. $2,332,633 (1938) 2

HUBBELL Elec. Dept., Box 42, 68375, 402/436-2745, Gerald Van Winkle, comm.; 90 met.; no gen.; pur. 505,833 kWh; rev. $27,330. 2

IMPERIAL Mun. Utils., 919 Douglas, 69033, 308/882-4245, Marvin S. Athey, supt. of utils.; 1,100 met.; no gen. (600 kW oil-fired eng., 100 kW hydro standby); pur. 19,102,000 kWh; rev. $691,207. (1915) 2

INDIANOLA, City of, Drawer F, 69034, 308/364-2413, Warren Young, light comm.; 380 met.; no gen.; pur. 4,084,000 kWh; rev. $227,356. 2

KBR RURAL PUBLIC POWER DISTRICT, Box 187, Ainsworth, 69210, 402/387-1120, Duane Philben, mgr.; 3,175 met.; no gen.; pur. 44,575,296 kWh; rev. $2,151,931. (1950) 2

KIMBALL Utilities, 223 S. Chestnut, 69145, 308/235-3639, Robert E. Arraj, dir. pub. works; 1,318 met.; gen. 9,900 kW eng., 15.7 million kWh; rev. $885,479. (1912) 1

LAUREL Mun. Elec. Light & Power, 101 W. 2nd St., 68745, 402/265-3112, L. J. Mallatt, city admin.; 616 met.; gen. 3,885 kW dual-fuel eng., 117,000 kWh; pur. 6,751,000; rev. $278,320 (1916) 2

LEIGH, Village of, Box 277, 68643, 402/487-3303, Reynold Dolesh, maint.; 298 met.; no gen.; pur. 4,207,200 kWh; rev. $172,202. 2

LEXINGTON Elec. Dept., 406 E. 7th St., 68850, 308/324-2341, Pete Bishop, elec. supt.; 3,400 met.; no gen.; pur. 70,992,492 kWh; rev. $2,514,411 (1945) 2

LINCOLN Elec. System, 1200 "N" St., Suite 300, 68508, 402/475-4211, Walter A. Canney, adm.; 79,992 met.; gen. 238,000 kW, 133,000 kW coal, 20,000 kW oil, 85,000 kW oil (comb turbine), 408,641,000 kWh; sales 1,492,734,000 kWh; rev. $63,692,000. (1966). 2

LODGEPOLE Water & Light Dept., Box 266, 69149, Lloyd R. Dykman, supt.; 200 met.; gen. 245 kW eng.; pur. 1.6 million kWh.

LOUP RIVER PUBLIC POWER DISTRICT, 2404-15th St., Box 988, Columbus, 68601, 402/564-3171, Max E. Kiburz, gen. mgr.; 15,040 met.; gen. 48,150 kW hydro, 145,038,400 kWh; sales 544,990,387 kWh; rev. $19,278,204. (1933) 2

LOUP VALLEYS RURAL PUBLIC POWER DISTRICT, Box 166, Ord, 68862, 308/728-5541, Wilbert J. Calvin, mgr.; 3,511 met.; no gen.; pur. 43,102,738 kWh; rev. $2,143,235. (1956) 2

LYMAN, Village of, Light Dept., Box 301, 69352, 308/787-1444, Martin Staad, maintenance; 265 met.; no gen.; pur. 3,460,500 kWh; rev. $148,119. 2

LYONS Utils., 335 Main St., 68038, 402/687-2130, Paul R. Hayes, supt.; 643 met.; no gen.; pur. 258,686 kWh; rev. $329,808. 2

MADISON, City of, 110 W. 1st St., 68748, 402/454-2625, Mark I. Arbuthnot, city adm., 1,361 met.; gen. 5,261 kW dual-fuel; sales 33,054,000 kWh; rev. $1,447,693. 2

McCOOK PUBLIC POWER DISTRICT, Box 739, McCook, 69001, 308/345-2500, James A. Underwood, mgr.; 4,600 met.; no gen.; pur. 123,195,100 kWh; rev. $5,362,622 2

MINDEN Light & Water Comm., 325 N. Colorado Ave., 68959, 308/832-1365, Thomas B. Kenney, supt.; 1,800 met.; no gen.; pur. 2,698,736 kWh; rev. $1,270,800. 2

MITCHELL Mun. Utils., 1444-12th St., 69357, 308/623-2133, 623-2446, Don R. Ward, supt.; 1,039 met.; no gen.; pur. 14.2 million kWh; rev. $426,311. (1934) 1

MORRILL Village of, Light & Power, Box 305, 69358, 308/247-2312, Richard J. Doyle, supt.; 804 met.; no gen.; sales 10,392,496 kWh; rev. $404,868. 2

MULLEN, Village of, Box 187, 69152, 308/546-2625, Wayne Kautz, util. supt.; 400 met.; gen. 1,125 kW diesel oil-fired, 26,050 kWh; pur. 4,660,850 kWh; rev. $213,630. (1957) 2

NEBRASKA CITY Utilities, 100 Central Ave., 68410, 402/873-3353, Donald Farson, oper. supt.; 5,316 met.; gen. 30,265 kW dual-fuel, 3,600,130 kWh; sales 7,945,764 kWh; rev. $403,667. 2

NEBRASKA PUBLIC POWER DISTRICT (formerly Consumers Public Power District), 1414 15th St., Box 499, Columbus, 68601, 402/563-5527, Don E. Schaufelberger, gen. mgr.; 108,393 met.; gen. 2,197,700 kW, 1,555,000 kW coal, 162,300 kW gas, 760,000 kW nuclear; 149,000 kW oil (comb turbine), 28,900 kW oil (eng), 19,010 kW gas (eng), 123,000 kW hydro, 7,581,807,027 kWh; sales

8,460,984; rev. $267,821,554. (1939) [2]

NELSON Mun. Light & Water Dept. Box 327, 68961. 402/225-4401, Virgil Schleif, utils. supt., 400 met.; no gen.; pur. 3,934,487 kWh; $178,721. [2]

NORRIS PUBLIC POWER DISTRICT, Box 399, Beatrice, 68310, 402/223-4038, Glen R. Schmieding, gen. mgr.; 11,628 met.; gen. 720 kW hydro, pur. 324,164,000 kWh; rev. $12,538,000. (1941) [2]

NORTH CENTRAL PUBLIC POWER DISTRICT, Box 7, Creighton, 68729, 402/358-5112, Donald G. Elwood, mgr.; 3,639 met.; no gen.; pur. 57,012,258 kWh; rev. $2,658,033. (1945) [2]

NORTHEAST NEBRASKA RURAL PUBLIC POWER DISTRICT, Box 39, Emerson, 68733, 402/695-2642, Cletus J. Temple; 2,696 met.; no gen.; pur. 56,029,938 kWh; rev. $2,356,176 (1939). [2]

NORTH PLATTE City of, Light & Power, Box 490, 69101, 308/532-5320, John F. Cox, mgr.; 13,113 met.; no gen.; sales 169,782,256 kWh; rev. $7,558,347. (1940) [2]

NORTHWEST RURAL PUBLIC POWER DISTRICT, Box 249, Hay Springs, 69347, 308/638-4445, Rolland Skinner, mgr.; 2,727 met.; no gen.; pur. 49,503,240 kWh; rev. $2,965,883. (1946) [2]

OMAHA PUBLIC POWER DISTRICT, 1623 Harney St., 68102, 402/536-4000, B. W. Reznicek, gen. mgr.; 213,154 met.; gen. 1,992,100 kW, 1,213,800 kW coal, 83,000 kW oil, 465,200 kW nuclear, 212,200 kW oil turbine, 17,900 kW oil (eng.), 6,667,830,900 kWh; sales 6,260,741,000 kWh; rev. $220,356,120. (1946) [2]

ORD, City of, 200 S. 16th St., 68862, 308/728-3595, Gene Baugh, util. supt.; 1,529 met.; gen. 10,000 kW, sales 18,274,556, rev. $1,040, 635. (1916) [2]

OXFORD Mun. Light & Power Plant, 68967, Ronald Ludeke, supt.; gen. 4,220 kW eng.

PAXTON Light & Power Dept., 69155, Keith Loper, supt.; 274 met.; gen. 580 kW eng.

PENDER Mun. Light & Power Plant, 68047, 402/385-3179, Robert Fendrick, supt; 655 met.; gen. 5,300 kW eng., 6.1 million kWh; pur. 4 million kWh; rev. $350,000. (1920)

PIERCE Utils, Light & Power, 114 S. Brown, 68767, 402/329-4535, Clarence H. Wattier, supt.; 916 met.; no gen.; pur. 13,517,788 kWh; rev. $553,549. (1941) [2]

PLAINVIEW Mun. Power Plant, Box 307, 68769, 402/582-4533, Fred Diedrichsen, city admin.; 700 met.; gen. 3,100 kW eng., 3.5 million kWh; pur. 5 million kWh; rev. $350,000.

POLK Light & Water Works, 68654, 402/765-6471, Arnold L. Neuhaus, supt.; 250 met.; no gen.; pur. 320,080 kWh; rev. $146,931. (1906) [2]

POLK COUNTY RURAL PUBLIC POWER DISTRICT, 120 W. 4th St., Box 465, Stromsburg, 68666, 402/764-4381, Merlin Steele, mgr.; 2,433 met.; no gen.; pur. 47,580,605 kWh; rev. $2,650,304. [2]

PRAGUE Elec. Dept., 68050, 402/663-4320 Robert Koranda, light comm.; 180 met.; no gen.; pur. 1.8 million kWh. [2]

RANDOLPH Mun. Light Plant, Box 220, 68771, 402/337-0553, LeRoy Brummels, supt.; 662 met.; gen. 2,400 kW dual-fuel eng., 122,700 kWh; pur. 5,618,789 kWh; rev. $254,419. (1917) [2]

RED CLOUD Mun. Elec. Dept., 540 N. Webster, 68970, 402/746-2215, Kenneth P. Schwartz, supt. of utils.; 836 met.; gen. 6,500 kW dual-fuel eng., 135,600 kWh; pur. 8,505,937 kWh; rev. $402,401. (1912)

REYNOLDS Village of, Box 98, 68429, 402/547-2251, Don Gregory, utils. supt.; 68 met.; no gen.; pur. 470,800 kWh; rev. $29,705. (1923) [2]

ROOSEVELT PUBLIC POWER DISTRICT, 1633 13th St., Box 97, Mitchell, 69357, 308/623-2124, H. F. Moranville, mgr.; 2,265 met.; no gen.; pur. 38,727,576 kWh; rev. $1,713,884. (1935) (Includes former Gering Valley Rural Public Power District.) [2]

ST. PAUL, City of, Utils., 522 Howard Ave., 68873, 308/754-4483, Charles M. Schmid, City Supt.; 1,041 met.; no gen.; pur. 12,506,520 kWh; rev. $201,618. [2]

SALEM Light & Water Comm., 68433, N. E. Wickham, light comm., 95 met.; no gen.; rev. $26,138.

SARGENT, City of, Box 40, 68874, 308/527-4200, Robert Gruber, supt.; 460 met.; 2,488 kW dual-fuel eng., 831,800 kWh; pur. 4,743,371; rev. $256,455. [2]

SCHUYLER Dept. of Utils, 124 E. 11th St., 68661, 402/352-5444, Nelson Hamblin, Utils. supt.; 2,166 met.; gen. 7,500 kW dual-fuel oil & gas steam, kWh, none; pur. 70,657,541 kWh; rev. $2,464,558. (1892) [2]

SEWARD Mun. Elec. Light Dept., Box 38, 7th St., 68434, Lawrence Fiala, light comm.; 2,500 met.; no gen.; pur. 131,382,232 kWh; $1,978,908. (1921) [2]

SEWARD COUNTY RURAL PUBLIC POWER DISTRICT, Box 69, Seward, 68434, 402/643-3434, Ron D. Holsteen, mgr.; 2,731 met.; no gen.; pur. 43,426,696 kWh; rev. $2,243,310. (1939) [2]

SHICKLEY Utils., 68436, Earl Friden, board chairman; 200 met.; no gen.; pur. 3.2 million kWh; rev. $137,673. (1923) [2]

SIDNEY, City of, 1115-13th Ave., 69162, 308/254-5300, William A. Snell, city mgr.; 2,992 met.; gen. 675 kW oil-fired, 7,510 kW dual-fuel; 887,000 kWh; sales 31,048,635 kWh; rev. $1,447,434. (1944) [2]

SNYDER Elec. Dept., 68664, 402/568-2306, Marvin M. Mead, supt., 193 met.; no gen.; pur. 4,905,613 kWh; rev. $180,516. (1910) [2]

SOUTH CENTRAL PUBLIC POWER DISTRICT, Box 406, Nelson, 68961, 402/225-2351, Yale A. Meyer, mgr.; 3,979 met.; no gen.; pur. 85,226,564 kWh; rev. $3,449,157. (1961) [2]

SOUTH SIOUX CITY Elec. Dept., 1615 Dakota Ave., 68776, 402/494-5800, Richard H. Berggren, clerk; 3,840 met.; no gen.; pur. 75,471,648 kWh; rev. $3,146,679. [2]

SOUTHERN NEBRASKA RURAL PUBLIC POWER DISTRICT, 1306 W. 3rd St., Box 340, Grand Island, 68801, 308/384-2350, Charles J. Hoke, gen. mgr.; 16,251 met.; no gen.; pur. 426,968,383 kWh; rev. $16,867,122. (1936) [2]

SOUTHWEST PUBLIC POWER DISTRICT, 221 N. Main, Box J, Palisade, 69040, 308/285-3295, Donald H. Husted, gen. mgr.; 5,000 met.; no gen.; pur. 100,000,000 kWh; rev. 5,000,000. (1945) [2]

SPALDING Mun. Light & Power Co., 68665, 308/497-2661, Paul F. Semper, supt.; 455 met.; gen. 2,353 kW, 2,203 kW eng., 150 kW hydro, 510,300 kWh; pur. 4,491,926 kWh; rev. $120,546. (1954) [2]

SPENCER Village of, Mun. Lt. & Pwr., Box 15, 68777, 402/589-1130, Lyle Karnes, Lt. & Wtr. comm.; 340 met.; no gen.; pur. 4,825,843 kWh; rev. $212,400. [2]

STANTON Mun. Water & Light Plant, 68779, 402/439-2119, Vernon Reese, city supt.; 650 met.; no gen.; pur. 68.7 million kWh.

STANTON COUNTY PUBLIC POWER DISTRICT, Box 308, Stanton, 68779, 402/439-2228, George E. Cunningham, mgr.; 2,484 met.; no gen.; pur. 36,691,753 kWh; rev. $1,753,094. (1936) [2]

STRATTON Water & Light Dept., Box 116, 69043, 308/276-2184, Mike Petersen, utils. supt.; 300 met.; no gen.; pur. 3,589,438 kWh; rev. $195,275. [2]

STROMSBURG Light and Water Dept., 122 E. 3rd, 68666, 402/764-2561, M.D. Simpson, Supt., 610 met.; no gen.; pur. 7,665,708, rev. $381,516. [2]

STUART Mun. Water & Power, Box 177, 68780, 402/924-3977, M. A. Jauernig, supt.; 320 met.; gen. 1,328 kW, 653 kW oil-fired eng., 675 kW dual-fuel eng., kWh none; 1.4 million kWh; pur. 4,355,000 kWh; rev. $176,000. (1922) [2]

SUPERIOR Utils., City of, 135 W. 4th St., Box 160, 68978, 402/879-4711, Richard Elliott, util. supt.; 1,519 met.; no gen.; pur. 24,994,056 kWh; rev. $1,073,571. (1941) [2]

SUTTON Light & Power Plant, Box 437, 68979, Rolly Kastens, comm.; 725 met.; no gen.; pur. 2.6 million kWh.

SYRACUSE Utils., 578 Mohawk, 68446, 402/269-2173, Donald L. Block, util. supt.; 835 met.; no gen.; pur. 11,427,225 kWh; rev. $415,050. (1910) [6]

TALMAGE Elec. Dept. City Hall, Box 66, 68448, 402/264-3715, Melvin Howe, supt.; 212 met.; no gen.; pur. 1.9 million kWh; rev. $42,970. [0]

TECUMSEH, City of, 122 S. 4th St., 68450, 402/335-3025, Lloyd Hubbs, util. supt.; 995 met.; gen. 4,600 kW; sales 16,436,000 kWh; rev. $589,824 (Plant leased to Omaha Public Power District.) (1890) [2]

TRENTON Mun. Light & Power, 223 W. C St., 69044, Barney Lee Whatley, supt.; 450 met.; gen. 880 kW eng., 1.1 million kWh; pur. 1.1 million kWh; rev. $5c,039. [0]

TWIN VALLEYS PUBLIC POWER DISTRICT, Box 160, Cambridge, 69022, 308/697-3315, Paul Liess, gen. mgr.; 4,439 met.; no gen.; pur. 56,380,288 kWh; rev. $2,996,634. [2]

UNIVERSITY OF NEBRASKA Utility Plant, 14th & W. St., Lincoln, 68588, Douglas Schmidt, supt.; gen. 6,000 kW steam, 13,574,000 kWh; pur. 87,539,800 kWh.

WAHOO City of, 605 N. Broadway, 68066, 402/443-3222, Donald

Peterson, Lt. and Water comm.; 1,869 met.; 500 kW oil, 13,140 kW dual-fuel; sales 28,568,965 kWh; rev. $1,274,083. (1908) 2

WAKEFIELD City Light Plant, 303 Oak St., Box 179, 68784, 402/287-2547, Kenneth Baker, light comm., supt.; 575 met.; gen. 4,870 kW eng., 9 million kWh; pur. none. (1917)

WALTHILL Mun. Elec. Dept., 68067, 402/846-5921, Henry L. Johnson, supt.; 400 met.; no gen.; pur. 5,063,927 kWh; rev. $277,487. 2

WAUNETA Mun. Utils, 69045, 308/394-5390, Arleigh Kincaid, supt. of util.; 549 met.; pur. 8.2 million kWh; rev. $182,275. (1948) 0

WAYNE, Mun. Power Plant, 208 S. Main, 68787, 402/375-2866, Herman Wacker, Supt., 1,994 met.; sales 29,480,996; rev. $1,142,000. (1920) 2

WAYNE COUNTY PUBLIC POWER DISTRICT, Box 190, Wayne, 68787, 402/375-1360, E. A. Schroeder, mgr.; 2,650 met.; no gen.; pur. 46.8 million kWh; rev. $2,073,570. (1939) 2

WEST POINT Light & Water Works, 440 S. Main, 68788, 402/372-2466, Ralph Eby, city engr.; 1,689 met.; gen. 8,565 kW duai-fuel, 24,910,024 kWh; sales 23,465,634 million kWh; rev. $828,125. (1922) 2

WHEAT BELT PUBLIC POWER DISTRICT, 2104 Illinois St., Box 177, Sidney, 69162, 308/254-5871, Gene M. Lienemann, gen. mgr.; 3,902 met.; no gen.; pur. 117,997,135 kWh; rev. $5,583,375. (1947) 2

WILBER Water & Light Dept., 68465, Nelson Behrens, supt.; 700 met.; gen. 2,430 kW eng.

WILCOX Light & Water Comm., 68982, 308/478-5510, Merle Ortegren, util. supt.; 211 met.; no gen.; pur. 3,600,000 kWh; rev. $110,937. 2

WINSIDE, Village of, Box 206, 68790, 402/286-4422, Dennis Van Houten, supt.; 259 met.; no gen.; sales 2,272,067 kWh; rev. $104,972. 2

WISNER Light & Water Dept., 1115 Ave. E, Box 367, 68791, 402/529-3383, Roland Johnson, util. supt. 724 met.; gen. 1,905 kW oil-fired eng.; pur. 11,936,448 kWh; rev. $364,743. (1905) 2

WOOD RIVER, City of, 68883, 308/583-2515. Wayne Woods, supt.; 445 met.; no gen.; pur. 8,118,733 kWh; rev. $399,748 2

WYMORE, City of, 115 W. E St., 68466, 402/645-3377, John Sullivan, supt.; 910 met.; no gen.; pur. 9,572,735 kWh; rev. $323,210. 2

YORK COUNTY RURAL PUBLIC POWER DISTRICT, Hgy. 81 So., Box 219, York, 68467, 402/362-3355, Hilary Neesen, gen. mgr.; 3,679 met.; no gen.; pur. 74,395,375 kWh; rev. $3,534,257. (1938) 2

The following Nebraska communities own their own municipal electric systems which are operated by Nebraska Public Power District under lease agreements:

ABIE, ADAMS, AINSWORTH, ALDA, ALLEN, ANOKA, ARCADIA, ASHTON, ATKINSON, ATLANTA, AURORA, AXTELL, BANCROFT, BARADA, BASSETT, BAZILE MILLS, BEAVER CROSSING, BEE, BEEMER, BELDEN, BELLWOOD, BELVIDERE, BENEDICT, BERTRAND, BIG SPRINGS, BLADEN, BLOOMINGTON, BLUE SPRINGS, BOELUS, BRADY, BRISTOW, BROADWATER, BRULE, BRUNING, BRUNO, BRUNSWICK, BURCHARD, BUTTE.

CAIRO, CARLETON, CENTER, CHADRON, CHAPMAN, CLARKS, CLATONIA, CLAY CENTER, CLEARWATER, CLINTON, CODY, COLERIDGE, COMSTOCK, CONCORD, CORDOVA, CORTLAND, CRAIG, CRAWFORD, CREIGHTON, CROFTON, CROOKSTON, CUSHING, DANNEBROG, DAWSON, DAYKIN, DEWEESE, DIXON, DODGE, DONIPHAN, DUBOIS, DWIGHT, EDISON, ELBA, ELGIN, ELM CREEK, ELSIE, ELWOOD, EMMET, EUSTIS, EWING, EXETER, FAIRFIELD, FIRTH, FORDYCE, FUNK, GARLAND, GENEVA, GIBBON, GOEHNER, GORDON, GRAFTON, GREELEY, GRESHAM, GUIDE ROCK, HALLAM, HARDY, HARTINGTON, HARVARD, HAY SPRINGS, HEARTWELL, HENDERSON, HENDLEY, HOMER, HORDVILLE, HOSKINS, HUBBARD, HUMBOLDT, HUNTLEY, INMAN, JACKSON, KEARNEY, KENESAW, KILGORE.

LAWRENCE, LEWELLEN, LONG PINE, LOOMIS, LOUP CITY, LUSHTON, LYNCH, MCCOOK, MCCOOL JUNCTION, MCGREW, MCLEAN, MADRID, MAGENT, MARQUETTE, MARTINSBURG, MASKELL, MEADOW GROVE, MELBETA, MERRIMAN, MILFORD, MILLER, MILLIGAN, MINATARE, MURRAY.

NAPONEE, NEHAWKA, NENZEL, NEWCASTLE, NEWPORT, NORA, NORFOLK, NORTH LOUP, OAK, OAKDALE, OAKLAND, OBERT, OGALLALA, OHIOWA, O'NEILL, ONG, ORCHARD, ORLEANS, OSCEOLA, OSHKOSH, OSMOND, OVERTON, PAGE, PALMER, PAWNEE CITY, PHILLIPS, PICKRELL, PILGER, PINE RIDGE, PLATTSMOUTH, PLEASANT DALE, PLYMOUTH, PONCA.

RAVENNA, REPUBLICAN CITY, RISING CITY, RIVERTON, ROYAL, RUSHVILLE, RUSKIN, SARONVILLE, SCOTIA, SCOTTSBLUFF, SCRIBNER, SHELBY, SHELTON, SHUBERT, SILVER CREEK, STAMFORD, STAPLEHURST, STEINAUER, STELLA, STERLING, STOCKHAM, STRANG, SURPRISE, SUTHERLAND, SWANTON.

TABLE ROCK, TAMORA, TEKAMAH, THAYER, TILDEN, TOBIAS, UEHLING, ULYSSES, UNION, UTICA, VALPARAISO, VENANGO, VERDON, VIRGINIA, WACO, WATERBURY, WAUSA, WESTERN, WHITNEY, WINNEBAGO, WINNETOON, WOLBACH, WYNOT, YORK.

The following Nebraska communities own their own municipal electric systems which are operated by Loup Power District under lease agreements:

ALBION, BELGRADE, CEDAR RAPIDS, COLUMBUS, CORNLEA, CRESTON, DUNCAN, FULLERTON, GENOA, HOWELLS, HUMPHREY, LINDSAY, MONROE, NEWMAN GROVE, PETERSBURG, PLATTE CENTER, PRIMROSE, RAEVILLE, RICHLAND, ST. BERNARD, ST. EDWARD, TARNOV.

NEVADA

ALAMO POWER DISTRICT NO. 3, Box 156, Alamo, 89001, 702/725-3335, Daniel S. Stewart, mgr.; 420 met.; no gen; pur. 10,584,000 kWh; rev. $217,955. 2

BOULDER CITY, City of Elec. Dist. Dept., 900 Arizona St., 89005, 702/293-4300, Terry Zerkle, city mgr.; 3,400 met.; no gen.; pur. 85.5 million kWh; rev. $1,276,000. (1960) 0

CALIENTE Pub. Utils., City Hall, Box 150, 89008, 702/726-3782, Roy F. McWilliams, supt., 560 met.; no gen.; pur. 13.5 million kWh; rev. $190,000. (1943)

COLORADO RIVER COMMISSION OF NEVADA, Box 19090, Las Vegas, 89132-0090, 702/739-1902, Duane R. Sudweeks, dir.; no gen.; 11 wholesale customers, sales 1.3 billion kWh; rev. $16 million. 2

FALLON Mun. Elec. System, 55 W. Williams Ave., 89406, 702/423-5107, Ben T. Bartlett, P.E., city mgr.; 2,321 met.; no gen.; sales 28,420,000 kWh; rev. $1,867,705. (1903) 2

LINCOLN COUNTY POWER DIST. No. 1, SR 89063, Box 101, Pioche, 89043, 702/962-5122, William F. Lynch, mgr.; 95 met; no gen.; pur. 82,759,286 kWh; rev. $931,063. (1936) 2

MINERAL COUNTY POWER SYSTEM, Box 1457, Hawthorne, 89415, 702/945-2446, Martha Barlow, County Clerk, **(System leased to Sierra Pacific Power Co. until year 2000.)** 2

OVERTON POWER DISTRICT NO. 5, Box 374, Overton, 89040, 702/397-2512, A. Kent Bloomfield, mgr.; 2,118 met.; no gen.; pur. 68,768,623 kWh; rev. $1,424,802. (1938) 2

PIOCHE Pub. Util., Box 31, 89043, 702/962-5840, Patrick Kelly; 300 met.; no gen.; pur. 6,522,000 kWh; rev. $110,000. 2

TRUCKEE-CARSON IRRIGATION DISTRICT, 152 N. Maine, Fallon, 89406, 702/423-2141, Richard Lattin, mgr.; **(Electrical system leased to Sierra Pacific Power Co.)**

NEW HAMPSHIRE

ASHLAND, Town of, Elec. Dept., Highland St., Box 517, 03217, 603/968-4432, Thomas E. Marsh, supt.; 847 met.; gen. 80 kW hydro, sales 13,012,811 kWh; rev. $988,460. (1917) 2

LITTLETON Water & Light Dept., 30 Lafayette Ave., 03561, 603/444-2915, John L. Cassidy, supt.; 3,400 met.; no gen.; pur. 36,901,700 kWh; rev. $2,467,026. (1903) 2

NEW HAMPTON Village Precinct, 03256, 603/744-3517, Ralph Ness, mgr.; 170 met.; no gen.; pur. 2,001,531 kWh; rev. $147,370. (1914) 2

WOLFEBORO Mun. Elec. Dept., Box 629, 03894, 603/569-3900, Guy L. Krapp, mgr.; 3,342 met.; gen. 2,500 kW eng., sales 29,704,852 kWh; rev. $2,290,773. (1897) 2

WOODSVILLE Water & Light Dept., 3 N. Court St., 03785, 603/747-2442, Hayden Waterhouse, supt.; 1,196 met.; no gen., pur. 10,000,000 kWh; rev. $419,821. (1922) 2

NEW JERSEY

BUTLER Light Dept., 10 High St., 07405, 201/838-7200, Robert P. Hammer, adm.; 7,446 met.; no gen.; pur. 4,342,370 kWh; rev. $6,975,458. (1942) 2

LAVALLETTE Elec. Dept., Washington Ave., 08735, 201/793-7766, Carl F. Ohm, supt.; 2,500 met.; no gen.; rev. $790,218. (1927) 2

MADISON Water & Light Dept., Kings Road, 07940, 201/377-8000, Burton T. Conway, adm.; 5,600 met.; no gen.; pur. 79,748,000 kWh; rev. $6,073,000. (1900) 2

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NEW JERSEY
(continued)

MILLTOWN Elec. Dept., 39 Washington Ave., 08850, 201/828-2100, G. R. Newman, supt.; 2,437 met.; no gen.; pur. 35.2 million kWh; rev. $1,387,314.

PARK RIDGE Borough of, Elec. Dept., 53 Park Ave., 07656, 201/391-2113, Robert F. Kenney, supt.; 3,067 met.; no gen.; sales 31,354,651 kWh; rev. $1,990,629. (1904) 2

PATERSON Municipal Utilities Authority, 100 Hamilton Plaza, 07505, 201/278-7676, Joe Petriello, atty. **(Authority established in 1981 to rehabilitate hydro project on Passaic River.)** 2

PEMBERTON Borough Elec., 114 Hanover St., 08068, 609/894-8222, Harold Beck Sr., supt.; 510 met.; no gen.; sales 6,000,000 kWh; rev. $372,390. (1921) 2

SEASIDE HEIGHTS Borough Elec., Grant Ave., 08751, 201/793-0359, Leonard Ipri, supt.; 1,800 met.; no gen.

SOUTH RIVER Bd. of Pub. Works, 33 Gordon St., 08882, Thomas Noto, supt.; 6,767 met.; gen. 2,500 kW eng.; pur. 40 million kWh; rev. $1,953,728. 1

VINELAND Mun. Elec. Util., Seventh and Wood Sts., 08360, 609/691-3000, ext. 460, Michael Sesok Jr., gen. mgr. of mun. utils.; 15,797 met.; gen. 96,000 kW, 24,000 kW coal, 40,000 kW oil, 32,000 kW oil (comb. turbine), 247,183,900 kWh; sales 324,434,251 kWh; rev. $25,123,185. (1900) 2

NEW MEXICO

AZTEC, City of, 201 W. Chaco, 87410, 505/334-9456, Harold W. Lavender, city mgr.; 2,144 met.; gen. 1,600 kW gas-fired, sales 17,546,000 kWh; rev. $900,387. (1963) 2

CLAYTON Power Plant, 1 Chestnut St., 88415, 505/374-2711, Eli H. Garcia, city mgr.; 1,700 met.; gen. 6,150 kW dual-fuel eng., 16,117,800 kWh; pur. none; rev. $1,031,265. (1912) 2

FARMINGTON, City of, Elec. Util. System, Box 900, 87499, 505/327-7701, ext. 1165, Wm. C. Lewis, elec. util. dir.; 24,983 met.; gen. 32,000 kW gas, 1,600 kW oil-fired, 600 kW gas-fired, 200 kW hydro, 98,475,000 kWh; sales 345,767,532 kWh, rev. $22,298,399. (1954) 2

GALLUP City of, Elec. Dept., Box 1270, 87301, 505/863-5404, Robert C. Noe, util. dir.; 7,506 met.; no gen.; sales 146,074,000 kWh; rev. $6,305,174. (1941) 2

LOS ALAMOS County, Box 30, Los Alamos, 87544, 505/662-8130, Chris Ortega, actg. utils. mgr.; 4,472 met.; no gen.; sales 39,599,081 kWh; rev. $3,317,430. (1967) 2

RATON Pub. Service Co., 224 Savage Ave., Box 40, 87740, 505/445-9861, Nardi Gabriele, gen. mgr.; 3,948 met.; gen. 11,000 kW steam, 39,051,052 kWh; sales 33,034,000 kWh; rev. $2,138,494. (1928) 2

SPRINGER Elec. Dept., Box 488, 87747; 505/483-2682, Henry Arellano, city mgr.; 2,000 met.; no gen.; rev. $209,526. 0

TRUTH OR CONSEQUENCES, City of, Joint Util. system, 605 Sims St., 87901, 505/894-6674, Quentin Drunzer, city mgr.; 2,983 met.; no gen.; pur. 28,711,330 kWh; rev. $1,097,797. (1934?) 2

NEW YORK

AKRON Mun. Elec. Util., 21 Main St., Box 180, 14001, 716/542-9639, or 542-9604, Raymond Carlo Jr., village clerk-treas.; 1,285 met.; no gen.; sales 29,175,151 kWh; rev. $551,905. (1903) 2

ANDOVER Elec. Utils., 4 Main St., Box 721, 14806, 607/478-8452, Maynard Towner, supt.; 530 met.; no gen.; pur. 5,337,500 kWh; rev. $133,876. 2

ANGELICA, Village of, 14709, 716/466-7431, Paul Hollier, ofc. mgr.; 592 met.; no gen.; sales 6,350,000 kWh, rev. $155,676. (1930) 2

ARCADE Mun. Elec. Dept., 17 Church St., 14009, 716/492-1590, Howard W. Payne, supt. pub. wks.; 2,832 met.; no gen.; sales 96,769,075 kWh; rev. $1,551,629. (1909) 2

BATH Elec., Gas & Water Systems, Drawer 310, 14810, 607/776-3072, Wesley J. Payne, dir.; 3,508 met.; no gen.; sales 52,911,916 kWh; rev. $1,065,999. (1915) 2

BERGEN Village of, 16 N. Lake St., 14416, 716/494-1513, Roy G. Hill, supt. pub. wks; 477 met.; no gen.; pur. 10.8 million kWh; rev. $222,606. (1909) 1

BOONVILLE Mun. Comm. of, Box 59, 13309, 315/942-4461, John W. Gilbert, supt.; 2,310 met.; no gen.; pur. 47,444,700 kWh; rev. $1,009,778. (1903) 2

BROCTON Village of, 34 W. Main St., 14716, 716/792-4160, Rick Manzella, supt.; 600 met.; no gen.; pur. 10,704,583 kWh; rev. $153,000. (1904) 2

CASTILLE Village of, 51 N. Main St., Box 179, 14427, 716/493-5340, Lynn D. Washburn, supt.; 552 met.; no gen.; pur. 5,501,946 kWh; rev. $123,395. (1903) 2

CHURCHVILLE, Mun. Elec., 9 E. Buffalo St., Box M, 14428, 716/293-3720, Ronald J. Trinkl, supt. pub. wrks., 600 met.; sales 10,213,466 kWh; rev. $242,098. (1921) 2

ENDICOTT Mun. Light Plant, Municipal Plaza, 13760, 607/754-2400, Clark Vallequette, supt.; 2,850 met.; no gen.; pur. 41 million kWh; rev. $872,620. (1906) 1

FAIRPORT Mun. Comm., 31 S. Main St., 14450, Box 500, 716/223-0440, Wm. F. Tolhurst, supt., 10,332 met.; no gen.; pur. 229.4 million kWh; rev. $3,389,238. (1901) 0

FRANKFORT Mun. Elec., 107 W. Main St., 13340, 315/894-8611, John S. Migliore, supt.; 1,573 met.; no gen.; sales 13,625,880 kWh; rev. $283,609. (1960) 2

FREEPORT Mun. Elec. Util., 46 N. Ocean Ave., 11520, 516/378-4000, Ludovic Long, supt. elec. utils., 13,754 met.; gen. 50,500 kW, 515,340 million kWh; pur. 180.5 million kWh; rev. $8,932,603. (1896) 1

GOUVERNEUR, Village of, Municipal, 33 Clinton St., 13642, 315/287-1770, Ronald Cochrane, supt.; gen. 160 kW hydro. (1923) 2

GREENE Elec. Dept., 49 Genesee St., Box 207, 13778, 607/656-4500, Clifford Amell, supt.; 1,049 met.; no gen.; pur. 26,630,000 kWh; rev. $569,940 2

GREEN ISLAND Elec. Light Dept., 20 Clinton St., 12183, 518/273-2201, John W. Demarest, supt.; 1,180 met.; no gen.; pur. 7,461,000 kWh; rev. $247,145. (1895) 2

GREENPORT Mun. Elec. Light Plant, 236 Third St., 11944, 516/477-1748, James I. Monsell, supt.; 1,643 met.; gen. 6,965 kW dual-fuel, 438,000 kWh; pur. 17,888,000 kWh.; rev. $943,564. (1899) 2

GROTON, Mun. Elec., 108 Cortland St., 13073, 607/898-3001, Edward Smith, supt., 813 met.; no gen.; sales 15,525,330 kWh; rev. $278,770. (1933) 2

HAMILTON Mun. Power System, Box 119, 13346, 315/824-1111, -1112, -2120, John Rathbone, village engr.; 1,369 met.; no gen.; sales 39,658,194 kWh; rev. $946,652. (1895) 2

HOLLEY Elec. & Water Dept., 7 Franklin St., 14470, 716/638-6367, Raymond E. Neale, supt.; 828 met.; no gen.; pur. 15.5 million kWh; $241,024. 1

ILION Bd. of Light Comm., Municipal Bldg., Morgan St., 13357, 315/895-7749, Kevin J. Manfreda, supt.; 3,827 met.; no gen.; sales 51,467,954 kWh; rev. $1,045,007. (1901) 2

JAMESTOWN Bd. of Pub. Util., 200-212 E. Third St., 14701, 716/661-2385, James S. Pullan, gen. mgr., 19,670 met.; gen. 65,000 kW steam, 152.8 million kWh; pur. 324.5 million kWh; rev. $10,218,809. (1891) 0

LAKE PLACID Mun. Elec., 301 Main St., 12946, 518/523-2021, Charles White, supt.; 2,896 met.; no gen.; sales 76, 419,615 kWh; rev. $2,379,442. (1906) 2

LITTLE VALLEY, Village of, Municipal Bldg., 14755, 716/938-9151, Lawrence R. Holtz, supt. pub. wks.; 966 met.; no gen.; pur. 15,658,909 kWh; rev. $282,175. (1896) 2

MARATHON, Village of, Lighting Plant, 18 Tannery St., 13803, 607/849-6795, Robert H. Braman, supt.; 724 met.; no gen.; pur. 14,115,900 kWh; rev. $319,462 (1901) 2

MASSENA Elec. Dept., 71 E. Hatfield St., Box 209, 13662, 315/764-0253, Clifford G. Engstrom, gen. mgr.; 7,892 met.; no gen. (1981) 1

MAYVILLE Elec. Light Dept., Box 188, 14757, 716/753-2125, Ray Frost, supt. pub. wks.; 750 met.; no gen.; pur. 14.9 million kWh; rev. $229,591. (1896)

MOHAWK Mun. Comm., 28 Columbia St., 13407, 315/866-4170, William D. Wainwright, util. supt., 1,245 met.; no gen.; sales 16,306,295 kWh; rev. $400,455. (1904) 2

PENN YAN Mun. Bd., 2 Maiden Lane, 14527, 315/536-3374, Wesley G. Ryder, utils. mgr.; 2,523 met.; no gen.; pur. 44,038,900 kWh; rev. $780,725. (1905) 2

PHILADELPHIA Mun. Elec. System, 56 Main St., 13673, 315/642-3452, Bernard A. Rosbrook, supt.; 377 met.; no gen.; sales 6,226,167 kWh; rev. $99,946. (1906) 2

PLATTSBURGH Mun. Lighting Dept., 6 Miller St., 12901, 518/563-2200, George D. Reich, mgr.; 7,724 met.; no gen.; sales 457,766,668 kWh; rev. $7,434,542. (1941) 2

POWER AUTHORITY OF THE STATE OF NEW YORK, 10 Columbus Circle, New York, N.Y., 10019, 212/397-6200, Leroy W. Sinclair, pres.; 153 met.; gen. 6,881,000 kW, 4,102,000 kW hydro, 1,896,000 kW nuclear, 883,000 kW oil/gas steam, 31,104,182,000 kWh; pur. 3,000,000 kWh; sales 39,671,000,000 kWh, rev. $974,189,000. (1931) [2]

RICHMONDVILLE Power & Light, 22 E Main St., 12149, 518/294-7700, Bruce R. Stevens, supt.; 792 met.; no gen.; pur. 6,984,974 kWh; rev. $214,438. (1918) [2]

ROCKVILLE CENTRE, Pub. Util., Box 950, 110 Maple Ave., 11571, 516/766-0300, Ext. 211, Patrick J. Hester, supt. of utils.; 9,942 met.; gen. 32,400 kW, 8,800 kW oil (eng.), 32,400 kW dual-fuel, 30,454,000 kWh; sales 132,136,328 kWh; rev. $6,036,749. (1898) [2]

ROUSES POINT, Village of, Box 185 Lake St., 12979, 518/297-5502, James C. Fox, village adm.; 1,069 met.; no gen.; pur. 52,180,800 kWh; rev. $589,041. (1903) [2]

SALAMANCA Water & Light Dept., 225 Wildwood Ave., 14779, 716/945-3130, James M. Brundage, gen. mgr.; 3,300 met.; no gen.; pur. 56,000,000 kWh; rev. $887,600. (1913) [2]

SHERBURNE, Village of, Mun. Elec., 15 W. State St., 13460, 607/674-2300, Donald F. Jeffrey, supt.; 1,618 met.; no gen.; pur. 39,090,000 kWh; rev. $1,236,246. (1907) [2]

SHERRILL, City of, Power and Light, 601 Sherrill Rd., 13461, 315/363-2440, Lawrence A. Pickard, mgr.; 1,286 met.; no gen.; pur. 52,362,410 kWh; rev. $803,535. (1977) [2]

SILVER SPRINGS, Village of, Elec. Dept., 43 Main St., 14550, 716/493-2500, Robert E. Kupp, supt. pub. wks.; 354 met.; no gen.; pur. 3,309,876 kWh; rev. $70,003. (1912) [2]

SKANEATELES, Village of, Elec. Dept., 46 E. Genesee St., 13152, 315/685-5628, James A. Buff, supt.; 1,233 met.; no gen.; sales 18,511, 810 kWh; rev. $388,272. (1900) [2]

SOLVAY, Village of, Light Dept., 3143 Milton Ave., 13209, 315/468-6229, M. V. Raman, mgr.; 4,239 met.; no gen.; pur. 243,217,600 kWh; $2,590,913. (1896) [2]

SPENCERPORT Mun. Elec., 27 West Ave., 14559, 716/352-4771, James C. Bleier, supt.; 1,896 met.; no gen.; pur. 43,732,835 kWh; rev. $644,794. (1916) [2]

SPRINGVILLE, Village of, Elec., 5 W. Main, 14141, 716/592-4936, John Lipoff, elec. supt.; 2,055 met.; gen. 500 kW hydro, 1,854,535 kWh; pur. 38,496,018 kWh; rev. $655,977. (1895) [2]

THERESA, Mun. Light Comm., 217 Main St., 13691, 315/628-4425, Gary Eckert, supt.; 368 met.; no gen.; pur. 5,254,800 kWh; rev. $4,825,513. (1906) [2]

TUPPER LAKE Mun. Elec. System, 53 Park St., 12986, 518/359-3341, Donald T. Trudeau, elec. supt.; 2,727 met.; no gen.; sales 59,506,961 kWh; rev. $1,505,894. (1903) [2]

WATERTOWN, City of, Elec. Dept., Municipal Bldg., 13601, 315/788-7020, John J. Donoghue, supt.; 54 met. gen. 5,400 kW hydro, 26.2 million kWh; pur. 1.6 million kWh; rev. $430,000. (1924) [1]

WATKINS GLEN Elec. Dept., 303 N. Franklin St., 14891, 607/535-2736, John Barnes, lineman; 1,218 met.; no gen.; pur. 32,211,108 kWh; rev. $468,675. (1918) [2]

WELLSVILLE, Village of, Water & Light Dept., 97 W. State St., 14895, 716/593-4000, Donald MacFarguar, supt.; 2,459 met.; no gen.; pur. 47,281,901 kWh; rev. $792,531. (1915) [2]

WESTFIELD Bd. of Pub. Utils., 23 Elm St., 14787, 716/326-2145, Richard A. Crofoot, supt.; 2,610 met.; no gen.; pur. 54,229,241 kWh; rev. $1,035,970,000. (1892) [2]

NORTH CAROLINA

ALBEMARLE Light Dept., Box 190, 28001, 704/982-0131, D. Lendell Smith Jr., dir. pub. wks.; 8,795 met.; no gen.; pur. 196.7 million kWh; rev. $5,561,090.

APEX, Town of, Box 250, 27502, 919/362-8166, Ronald D. Wicker, dir. pub. wks.; 1,633 met.; no gen.; pur. 29.2 million kWh; rev. $1,253,431. (1916) [2]

AYDEN, Town of, Box 217, 28513, 919/746-4152, Mark A. Suggs, dir. of utils.; 3,074 met.; no gen.; pur. 39,028,353 kWh, rev. $1,478,466. (1916) [2]

BELHAVEN, Town of, Box 220, 27810, 919/943-3105, Steven Weatherman, town mgr.; 1,137 met.; no gen.; pur. 16,252,800 kWh; rev. $870,675. (est. 1920) [2]

BENSON Power & Light Dept., Box 157, 27504, 919/894-4953, Z. K. Lucas, dir.; 1,319 met.; no gen.; pur. 21.7 million kWh; rev. $774,944.

BLACK CREEK, Town of, W. Center St., Box 8, 27813, 919/243-6439, Jerry G. Crocker, dir. pub. wks.; 496 met.; no gen.; sales 6,210,282 kWh; rev. $353,718. (1922) [2]

BOSTIC Elec. Dept., 28018, 704/245-5108, Charles Morgan, supt. of lights, clerk; 151 met.; no gen.; pur. 1.6 million kWh; rev. $56,221.

CHERRYVILLE, City of, Elec. Dept., 116 S. Mountain St., 28021, 704/435-9132, Ted Mace, dir.; 2,134 met.; no gen.; pur. 42.9 million kWh; rev. $1,269,800. [1]

CLAYTON Lighting Dept., 231 E. Second St., Box 777, 27520, 919/553-5866, Ralph A. Clark, adm.; 2,008 met.; no gen.; pur. 28.3 million kWh; rev. $968,264. (1925)

CONCORD Bd. of Light & Water Comm., Box 567, 28025, 704/786-6161, Don T. Howell, dir. util.; 11,593 met.; no gen.; sales 236,985,562 kWh; rev. $9,170,275. (1901) [2]

CORNELIUS Mun. Utils., Box 66, 28031, 704/892-6031, Kermit W. Ballard, dir. util., 584 met.; no gen.; pur. 9.2 million kWh; rev. $286,988.

DALLAS Elec. Dept., 131 N. Gaston St., 28034, 704/922-3176, Scott Braddy, supt.; 2,912 met.; no gen.; pur. 37.5 million kWh; rev. $1,521,599. (1925) [1]

DREXEL Elec. Dept., Box 188, 28619, 704/437-7421, Harold L. Dean, dir. util.; 912 met.; no gen.; pur. 10,791,705 kWh; rev. $469,440. (1927) [2]

EDENTON Utils., W. Freemason St., Box 300, 27932, 919/482-4414, William Crummey, dir. pub. utils.; 3,026 met.; no gen.; pur. 62.4 million kWh; rev. $3,561,565. (1900) [1]

ELIZABETH CITY, City of, Box 347, 27909, 919/338-3981, Tommy M. Combs city mgr.; 8,374 met.; no gen.; sales 167,421,148 kWh; rev. $9,155,111. (1926) [2]

ENFIELD Elec. Utils., Box 87, 27823, 919/445-5586, Joseph N. Adkins, util. dir.; 1,489 met.; no gen.; pur. 22.8 million kWh, rev. $880,945.

FARMVILLE, Town of, Box 87, 27828, 919/753-3021, James A. Wooten Jr., dir. of utils.; 2,245 met.; pur. 50,295,407 kWh; rev. $2,492,623. (1915) [2]

FAYETTEVILLE Pub. Wks. Comm., 508 Person St., Box 1089, 28302, 919/483-3814, Ray A. Muench Jr., adm.; 46,871 met.; gen. 200,000 kW oil, 100,000 kW gas turbine; sales 1,208,379,227 kWh; rev. $56,452,201. (1905) [2]

FOREST CITY Elec. Dept. 12 N. Powell St., 28043, 704/245-0148, Herb Toms, dir. pub. wks.; 3,728 met.; no gen.; pur. 81.9 million kWh; rev. $3,074,475. [1]

FOUNTAIN Mun. Elec. Dept., Box 194, 27839, 919/749-2881, Floyd Lucas, dir.; 325 met.; no gen.; pur. 3.8 million kWh; rev. $174,723.

FREMONT Light & Water Dept., 27830, 919/242-5151, Doug Lane, supt.; 836 met.; no gen.; pur. 11.1 million kWh; rev. $417,374.

GASTONIA, City of, Elec. Div., Box 1748, 302 E. Airline Ave., 28052, 704/866-6818, E. Graham Wilson, dir. pub. util.; 20,171 met.; no gen.; pur. 442 million kWh; rev. $17,439,745. (1900) [1]

GRANITE FALLS Elec. Light Plant, Drawer 10, 28630, 704/396-3131, Dewey J. Cook, dir. pub. utils.; 1,357 met.; no gen.; pur. 22.8 million kWh; rev. $777,257.

GREENVILLE Utils. Comm., Box 1847, 27834, 919/752-7166, Charles O'H. Horne Jr., dir. util.; 24,966 met.; no gen.; sales 594,558,323 kWh; rev. $32,246,602. (1905) [2]

HAMILTON, Town of, Box 238, 27840, 919/798-2001, Nancy White, clerk; 251 met.; no gen.; pur. 3,071,630 kWh; rev. $190,286. (1922) [2]

HERTFORD Lighting System, Box 32, 27944, 919/426-5311, W. D. Cox, supt.; 1,326 met.; no gen.; pur. 16.7 million kWh; rev. $685,684.

HIGHLANDS Mun. Plant, Box 563, 28741, 704/526-2118, Arnold Keener, supt.; 1,370 met., pur. 11.3 million kWh; rev. $209,044.

HIGH POINT, City of, Elec. Utils., Box 230, 27260, 919/887-2511, L. C. Williams Jr., dir. util.; 26,061 met.; no gen.; sales 517,310,207 kWh; rev. $22,108,580. (1893) [2]

HOBGOOD Mun. Elec. Dept., Box 217, 27843, 919/826-4283, Sidney G. Burnette, util. comm.; 444 met.; no gen.; pur. 3.4 million kWh; rev. $152,444.

HOOKERTON Elec. Dept., Box 296, 28583, 919/747-3816, Bennie Earl Oakes, supt.; 331 met.; no gen.; pur. 4.8 million kWh; rev. $196,490.

HUNTERSVILLE Elec. Dept., 28078, 704/875-6541, Richard L. French, mgr.; 562 met.; no gen.; pur. 15.1 million kWh; rev. $447,713.

KINGS MOUNTAIN Mun. Elec. Dept., Box 429, 28086, 704/739-2563, John Henry Moss, Mayor; 3,377 met.; no gen.; pur. 70,495,362 kWh; rev. $3,145,657. (1903) [2]

KINSTON, City of, Box 339, 28501, 919/527-2111, Elwood R. Whaley, dir. elec. util.; 13,300 met.; no gen.; pur. 312,890,000 kWh; rev. $13,074,627. 2

LA GRANGE, Town of, Box 368, 28551, 919/566-3186, E. B. Walters, util. dir.; 1,311 met.; no gen.; pur. 19,701,000 kWh; rev. $912,251. 2

LANDIS Light & Power Dept., 136 N. Central Ave., Box 8165, 28088, 704/857-2411, W. C. Deadmon, dir. util.; 2,253 met.; no gen.; pur. 33 million kWh; rev. $1,600,000. 2

LAURINBURG, City of, Elec. Dept., Box 249, 28352, 919/276-8324, P. G. Vandenberg, city mgr.; 4,426 met.; no gen.; pur. 86,342,000 kWh; rev. $3,515,079. (1925) 2

LEXINGTON, City of, Light & Power Dept., City Hall, 28 W. Center St., 27292, 704/246-2680, Bruce L. Kirk, supt.; 14,134 met.; no gen.; pur. 320,991,676 kWh; rev. $13,432,224. (1905) 2

LINCOLNTON Light & Power Dept., Box 617, 28092, 704/735-8348, Ronnie Dedmon, dir. pub. utils.; 2,190 met.; no gen.; pur. 42.4 million kWh; rev. $1,243,749.

LOUISBURG, Town of, 110 W. Nash St., 27549, 919/496-3406, Harold C. Foster, util. dir.; Tony Robertson, town admr.; 1,650 met.; no gen.; pur. 38,834,913 kWh; rev. $1,992,488. 2

LUCAMA Light Plant, 27851, 919/239-0560, Dave Pittiman, dir. util.; 770 met.; no gen.; pur. 6.9 million kWh; rev. $172,271.

LUMBERTON, City of, 725 N. Water St., 28358, 919/738-2255, Wayne Hedgepeth, dir.; 6,843 met.; no gen.; sales 208,606,000 kWh; rev. $8,874,796. (1915) 2

MACCLESFIELD, Town of, Elec. Dept., Box 185, 27852, 919/827-4823, Wiley Ford, supt.; 300 met.; rev. $200,000. (est. 1928) 2

MAIDEN, Town of, Box 125, 28650, 704/428-8178, David R. Walker, town mgr.; 819 met.; no gen.; pur. 34.9 million kWh; rev. $1,157,530. 2

MONROE, City of, Box 69, 28110, 704/289-8557, J. E. Hinkel, city mgr.; 6,026 met.; no gen.; sales 266,688,220 kWh; rev. $9,906,979. (1900) 2

MORGANTON, City of, Drawer 430, 28655, 704/437-8863, Douglas O. Bean, city mgr.; 6,396 met.; no gen.; pur. 194,822,689 kWh; rev. $6,175,073. (1912) 2

MURPHY Elec. Power Bd., Box 130, 28906, 704/837-2211, John Carringer, mgr.; 2,347 met.; no gen.; pur. 95.2 million kWh; rev. $2,346,502. (TVA power distributor) (1939)

NEW BERN, City of, Box 1129, 28560, 919/633-5161, Anthony Hooper, city mgr.; 11,657 met.; no gen.; sales 237,175,000 kWh; rev. $11,791,278. (1906) 2

NEW RIVER LIGHT & POWER CO., subsidiary of Appalachian State University, Box 1130, Boone, 28607, 704/264-3671, Donald R. Austin, gen. mgr.; 4,616 met.; pur. 126,829,200 kWh; rev. $5,089,894. (1916) 2

NEWTON Elec. Dept., Drawer 550, 28658, 704/464-2031, Glen P. Sims, dir. pub. utils.; 3,149 met.; no gen.; pur. 57.9 million kWh; rev. $1,992,609.

OAK CITY Mun. Utils., 27857, 919/798-7721, Laurie Jogner, town clerk; 227 met.; no gen.; pur. 2,833,700 kWh; rev. $171,853. 2

PIKEVILLE, Town of, Box 9, 27863, 919/242-5126, Raymond B. Glover, supt.; 500 met.; no gen.; pur. 7,153,456 kWh; rev. $697,349. (1934) 2

PINETOPS, Town of, Drawer C., 27864, 919/827-4435, Robert E. Varnell, util dir.; 694 met.; no gen.; sales 13,876,800 kWh; rev. $730,276. 2

PINEVILLE, Elec. Co., 200-208 Dover St., 28134, 704/889-2291, Jack G. Crump, town mgr.; 797 met.; no gen.; pur. 16,619,125 kWh; rev. $595,615. (1938) 2

RED SPRINGS, Town of, 217 S. Main St., 28377, 919/843-5849, Wayne Horne, town mgr.; supt.; 1,473 met.; gen. 23,188,120 kWh; pur. 24,707,290 kWh; rev. $1,124,299. 2

ROBERSONVILLE Water & Light Comm., 27871, 919/795-4414, James S. Simpson, dir. util.; 1,160 met.; no gen.; pur. 19.5 million kWh; rev. $603,068.

ROCKY MOUNT, City of, Box 1180, 27801, 919/977-2111, Carl W. Bateman Jr., dir. util.; 21,991 met.; no gen.; sales 574,253,356 kWh; rev. $25,377,873. 2

SCOTLAND NECK, Town of, Box 537, 27874, 919/826-3712, Sidney R. Williams, dir. pub. utils.; 1,574 met.; no gen.; pur. 22,454,880 kWh; rev. $1,215,582. 2

SELMA, Town of, 100 N. Raeford St., 27576, 919/965-3388, Fred Murray, supt.; 1,924 met.; no gen.; pur. 32.7 million kWh; rev. $1,305,361. 1

SHARPSBURG Town Office, Box 305, 27878, 919/446-9441, J. D. Barkley, Mayor; 734 met.; no gen.; pur. 7.2 million kWh; rev. $531,569. (1920) 1

SHELBY, City of, Box 207, 28150, 704/482-7367, Ralph B. Carlson, dir. util.; 7,081 met.; no gen.; pur. 148.6 million kWh; rev. $6,024,976. (1913) 1

SMITHFIELD, Town of, Box 761, 27577, 919/934-2116, H. C. Talton, city mgr.; 4,500 met.; no gen.; pur. 85,483,000 kWh; rev. $3,780,918. 2

SOUTHPORT, City of, 201 E. Moore St., 28461, 919/457-5460, James Splawn, util. dir.; 1,345 met.; no gen.; pur. 27,246,282 kWh; rev. $1,253,574. (1910) 2

STANTONSBURG, Town of, Box 10, 27883, 919/238-3608, Roland L. Gardner, supt.; 990 met.; no gen.; sales 12,180,400 kWh; rev. $646,190. 2

STATESVILLE, City of, Light Dept., 227 S. Center St., Box 1111, 28677, 704/873-2121, Clyde E. Bagwell, dir. util.; 10,060 met.; no gen.; pur. 255,758,976 kWh; rev. $10,209,803. (1889) 2

TARBORO, Town of, Box 220, 27886, 919/823-8121, Douglas Hathaway, dir. of elec. utils.; 4,890 met.; no gen.; pur. 206,275,800 kWh; rev. $10,333,724. 2

WAKE FOREST, Town of, 400 E. Elm St., 27587, 919/556-2024, Jerry Walters, town adm.; 2,000 met.; no gen.; pur. 32,029,500 kWh; rev. $1,533,733. (1915) 2

WALSTONBURG Mun. Plant, 27888, 919/753-4834, Ralph G. Beaman, supt.; 128 met.; no gen.; pur. 1.8 million kWh; rev. $73,536.

WASHINGTON, City of, Box 1988, 27889, 919/946-1033, Michael E. Finney, dir. elec. utils.; 10,600 met.; no gen.; pur. 198.1 million kWh; rev. $10,852,909. (1906) 1

WAYNESVILLE Mun. Elec. Dept., 28786, 704/456-3515, William L. Ross, dir.; 3,000 met.; no gen.; pur. 43.3 million kWh; rev. $1,479,422.

WILSON, City of, Box 10, 27893, 919/281-8111, T. Bruce Boyette, city mgr.; 22,444 met.; no gen.; sales 653,713,915 kWh; rev. $29,218,325. (1892) 2

WINDSOR, Town of, Box 508, 27983, 919/794-2331, David Overton, town adm.; 1,493 met.; no gen.; sales 25,554,879 kWh; rev. $1,681,395. (1922) 2

WINTERVILLE, Town of, Box 431, 28590, 919/756-2221, Harvey Lee Joyner, elec. dir.; 1,000 met.; no gen.; pur. 16,901,280 kWh; rev. $947,531. 2

NORTH DAKOTA

CAVALIER City Light & Power Plant, 58220, E. S. Thompson, mgr.; 564 met.; gen. 888 kW eng.

GRAFTON, City of, Light Dept., 344 Hill Ave., Box 547, 58237, 701/352-2180, Mel Durand, actg. supt.; 2,142 met.; gen. 4,160 kW eng., pur. 40,020,243 kWh; rev. $1,023,981. (1890) 2

HILLSBORO, City of, Box J, 58045, 701/436-4620, Carl Tessin, supt.; 800 met.; no gen.; pur. 17,625,600 kWh. 2

HOPE City Light & Power, 58046, 701/945-2794, Reed Jonason, city engr.; 220 met.; no gen.; pur. 4,581,382 kWh. 2

LAKOTA Mun. Utils., Box 505, 58344, 701/247-2561, Ervin Anderson;, supt.; 479 met.; no gen.; pur. 10,724,800 kWh; rev. $256,126. (1930) 2

MADDOCK, City of, Box 276, 58348, 701/438-2252, Odell A. Hakanson, util. supt.; 388 met.; no gen.; pur. 4,887,552 kWh; rev. $254,821. (1918) 2

NORTHWOOD Mun. Light & Power Plant, 58267, 701/587-6291, Art Johnson, city supt.; 500 met.; no gen.; pur. 12.3 million kWh; rev. $354,000. (1912) 2

PARK RIVER Mun. Light Plant, 340 Prospect Ave., 58270, 701/284-6399, Russell Lien, supt.; 840 met.; gen. 883 kW oil-fired eng.; 2913 kWh; pur. 17,642,080 kWh; rev. $444,246. (1901) 2

SHARON Light & Power Dept., 58277, Martin Jensen, mgr.; 112 met.

STANTON Mun. Power System, Box 156, 58571, 701/745-3202, Phyllis McKay, auditor; 275 met.; no gen.; pur. 150,744 kWh; rev. $213,719. (1974) 2

VALLEY CITY Mun. Utils., Box 240, 58072, 701/845-0380, Leif Ravnaas, supt.; 4,274 met.; gen. 3,000 kW gas-turbine, 6,310 kWh; pur. 68.5 million kWh; rev. $1,706,814. (1897) 1

OHIO

AMHERST Mun. Power & Light System, 647 Park Ave., 44001, 216/988-4224, Donald Woodings, supt.; 3,761 met. 1

	SHREWSBURY's Elec. Light Plant,	
	100 Maple Ave., 01545,	Address, zip code
	617/845-4881,	Telephone
	James E. Baker, mgr.	Title
Number of electric meters served	9,164 met.; gen. 13,750 kW eng.;	Installed generating capacity
Kilowatt hours generated annually	3,495,000 kWh; pur. 160,828,213 kWh	Purchases (or sales)
Gross annual electric revenue	rev. $9,205,220. (1908)	Year electric system established
	2	Year in which data updated ("2"=1982; "1"=1981; "0"=1980)

ARCADIA Mun. Light & Power, Box 235, 44804, 419/894-6009, Vernon Seel, adm.; 270 met.; no gen. 1

ARCANUM Water & Light, 104 W. South St., 45304, 513/692-8565, Michael Clark, supt.; 1,340 met.; no gen.; sales 15,095,360 kWh; rev. $845,991. (1905) 2

BEACH CITY, Village of, Bd. of Public Affairs, 301 N. Church St., Box 328, 44608, 216/756-2011, Robert Raff, supt.; 700 met.; no gen.; pur. 6,763,825 kWh; rev. $364,770 (1919) 2

BETHEL Bd. of Pub. Affairs, 235 W. Plane St., 45106, 513/734-2243, Dennis Barton, dist. supt.; 1,263 met.; no gen.; pur. 15.5 million kWh; rev. $382,110. (1904) 1

BLANCHESTER Bd. of Pub. Affairs, Box 158, 45107, 513/783-2141, Andrew Grieve, supt. of utils.; 1,600 met.; no gen.; sales 32,240,800 kWh; rev. $1,387,286. (1895) 2

BLOOMDALE Mun. Light & Power, Box 186, 44817, 419/454-2941, Raymon A. Taylor, supt.; 300 met.; no gen.; pur. 2.6 million kWh; rev. $109,000. 1

BOWLING GREEN Board of Public Utils., 515 E. Wooster St., 43402, 419/352-3541, Lyle B. Wright, dir. of utils.; 9,200 met.; no gen.; pur. 217,000,000 kWh; rev. $12,517,000. (1942) 2

BRADNER Light and Water Plant, Box 516, 43406, 416/288-2773, John Stahl, supt.; 445 met.; no gen.; pur. 5.6 million kWh; rev. $50,000. 1

BREWSTER Mun. Elec. Bd. of Pub. Affairs, 302 S. Wabash Ave., 44613, 216/767-4214, William Sessor, supt., elec. utils.; 899 met.; no gen.; pur. 15.3 million kWh; rev. $738,440. (1972) 1

BRYAN Mun. Light & Water Utils., 841 E. Edgerton St., 43506, 419/636-4232, ext. 33, John Curtin, dir. of util.; 3,987 met.; gen. 23,000 kW, 20,500 kW gas, 2,500 kW dual-fuel, 2,513,000 kWh; sales 118,890,577 kWh; rev. $6,906,635. (1897) 2

CAREY, Village of, 127 N. Vance St., 43316, 419/396-6130, James E. Kinsey, supt.; 1,623 met.; no gen.; pur. 54,504,000 kWh; rev. $1,873,288. (1909) 2

CELINA Mun. Utils., 426 W. Market St., 45822, 419/586-6464, Thomas A. Schwartz, dir.; 5,772 met.; gen. 12,500 kW coal; sales 108,287,929 kWh; rev. $5,739,996. (1900) 2

CLEVELAND, City of, Div. of Light & Power, 1201 Lakeside Ave., 44114, 216/664-2776, Joseph Pandy Jr., comm. of light & power; 46,107 met.; gen. 48,600 kW oil, 160,000 kW coal, 59,000 kWh; sales 514,051,542 kWh; rev. $34,900,976. (1906) 2

COLUMBIANA, Village of, 28 W. Friend St., 44408, 216/482-2173, A. E. Wardingley, village mgr.; 2,286 met.; no gen.; pur. 29.7 million kWh; rev. $1,219,901. 1

COLUMBUS, City of, Div. of Electricity, 90 W. Broad St., 43215, 614/222-7294, Henry A. Bell, supt.; 7,466 met.; no gen.; sales 322,748,370 kWh; rev. $16,172,210. (1898) 2

CUSTAR Mun. System, 23044 Defiance Pike, 43511, 419/669-7385, Edward Drummer, clerk; 125 met.; no gen.; pur. 1.5 million kWh. 1

CUYAHOGA FALLS Elec. System, 2550 Bailey Rd., 44221, 216/923-9921, C. O. Stout, supt.; 18,329 met.; no gen. sales 196,993,336 kWh; rev. $11,284,094. (1890s) 2

CYGNET Mun. Light Dept., Box 55, 43413, 419/655-2191, Tom Strickland, supt.; 258 met.; no gen.; pur. 2.5 million kWh; rev. $45,111. (1916) 2

DESHLER Mun. Utils., City Building, East North St., 43516, 419/278-1831, John S. Monteith, supt.; 888 met.; no gen.; sales 13,647,210 kWh; rev. $649,813. (1916) 2

DOVER Mun. Light & Power, E. Third St., 44622, 216/343-7725, Willard E. Seibert, dist. supt.; 5,741 met.; gen. 30,500 kW coal, 2,565 kW oil-fired, 77,055,000 kWh; sales 90,649,371 kWh. (1900) 2

EDGERTON Utils., Box 608, 43517, 419/298-2912 or 2722, Dale A. Mathys, village admin.; 774 met.; no gen.; sales 11,778,000 kWh; rev. $657,338. (1938) 2

ELDORADO Light & Water, 200 N. Main St., 45321, 513/273-3141, Robert Wehrley, supt.; 230 met.; no gen.; pur. 2.8 milllion kWh. (1940) 1

ELMORE Mun. Elec. Light & Water Plant, 340 Clinton St., 43416, 419/862-3454, Merle Harder, village supt.; 737 met.; no gen.; pur. 6,214,000 kWh; $407,214. (1912) 2

GALION Mun. Light & Power, 700 Primrose, 44833, 419/468-5520, G. W. Butterfield, supt.; 6,401 met.; no gen.; pur. 99.1 million kWh; rev. $4,205,190. 1

GENOA Mun. Light Plant, 102 E. 6th St., 43430, 419/855-8419, Wayne Smith, gen. supt.; 870 met.; no gen.; pur. 10.3 million kWh; rev. $518,000. (1925) 1

GEORGETOWN Mun. Light Plant, 301 S. Main St., 45121, 513/378-6144, Harold Howser, supt.; 2,000 met.; no gen.; pur. 24.5 million kWh. 1

GLOUSTER Water & Elec. Dept., 16 Front St., 45732, 614/767-3497, Delbert Skinner, supt.; 1,045 met.; no gen.; pur. 7.2 million kWh; rev. $151,089. (1924) 1

GRAFTON Mun. Util. Service, 1009 Chestnut St., 44044, 216/926-2401 Wilbur Keith, elec. supt., Allen Bartlett, village adm.; 760 met.; no gen.; pur. 10.2 million kWh; rev. $376,586. 1

GREENWICH Mun. Water & Light, 47 Main St., 44837, 419/752-4725, Thomas Baker, supt.; 609 met.; no gen.; pur. 8.8 million kWh. 1

HAMERSVILLE Bd. of Pub. Affairs, Box 146, 45130, 513/379-1716, Kay Elliott, clerk; 3,761 met. 1

HAMILTON Mun. Util., 20 High St., 45011, 513/868-5966, E. Leon Daggett, dir. of utils.; 24,754 met.; gen. 124,400 kW; 77,000 kW steam, 26,000 kW gas turbine, 1,400 kW hydro, 399,750,000 kWh, pur. 56,175,000 kWh; rev. $18,093,997 (1895) 2

HASKINS Mun. Light & Power, 43525, 419/353-5443, Delton Asmus, mayor; 200 met.; no gen. 1

HUBBARD Mun. Light & Power System, 13 W. Liberty St., 44425, 216/534-3090, Robert Randall, utils. supt.; 3,600 met.; no gen.; pur. 32 million kWh; rev. $447,767. 1

HUDSON, Village of, Mun. Elec., 27 E. Main, 44236, 216/650-1052, Wilmer Jacoby, supt.; 4,175 met.; no gen.; pur. 71,520,000 kWh; rev. $2,908,000. (1911) 2

JACKSON Mun. Elec. Light System, 45640, 614/286-2201, Burleigh Oiler, mayor; 557 met.; no gen.; pur. 36 million kWh. 1

JACKSON CENTER Mun. Elec. System, 124 E. Pike, 45334, 513/596-6314, Richard Sailor, village adm.; 555 met.; no gen.; pur. 13.1 million kWh; rev. $505,521. (1920) 1

LAKEVIEW Bd. of Pub. Affairs, 130 N. Main St., Box 197, 43331, 513/843-2851, A. J. Baker, clerk; 903 met.; no gen.; pur. 7.9 million kWh; rev. $279,833. 1

LEBANON, City of, City Bldg., 45036, 513/932-3060, Timothy Hansley, city mgr.; 4,500 met.; gen. 20,000 kW, 700 kW oil-fired, 19,300 kW dual-fuel, 450,000 kWh; sales 81,000,000 kWh; $4,198,389. (1897) 2

LODI Power & Light, 108 Ainsworth St., 44254, 216/948-1099, Carl Zdelar, supt.; 1,599 met.; no gen.; sales 22,534,962 kWh; rev. $1,204,879. (1943) [2]

LUCAS Bd. of Pub. Affairs, Box 213, 44843, 419/892-2178, James Sprang, supt.; 306 met.; pur. 3.0 million kWh. [1]

MARSHALLVILLE Mun. Utils. Dept., Box 227, 44645, 216/855-4241, Herb Brillhart, supt; 300 met.; no gen.; pur. 2 million kWh. [1]

MENDON Bd. of Pub. Affairs, Box 164, 45862, 419/795-3901, Lawrence J. Dicke, supt.; 300 met.; no gen.; pur. 1.7 million kWh; rev. $37,959. [1]

MILAN Mun. Elec. Light Dept., 9 E. Church, 44846, 419/499-4161, Larry Doerner, supt.; 700 met.; no gen.; pur. 16.7 million kWh; rev. $314,481. (1907) [1]

MINSTER Elec., 29 S. Hanover St., 45865, 419/628-2850, Edward A. Bruns, supt.; 998 met.; no gen.; pur. 44 million kWh; rev. $1,693,081. (1910) [1]

MONROEVILLE Mun. Elec., 8 Monroe St., Box 156, 44847, 419/465-4149, Joe Gravenhorst, supt.; 785 met.; no gen.; pur. 12.5 million kWh; rev. $550,174. (1906) [1]

MONTPELIER Mun. Utils., N. Jonesville St., 43543, 419/485-3693, John H. Bitler, admr.; 2,010 met.; no gen.; pur. 29,958,000 kWh. (1908) [2]

NAPOLEON City of, Light and Power, 255 W. Riverview, Box 151, 43545, 419/592-4010, Dave Mullholand, elec. dist. supt.; 4,745 met.; no gen. pur. 106.4 million kWh; rev. $5,432,052. (1894) [2]

NEW BREMEN Elec. Dist. System, 214 N. Washington St., Box 27, 45869, 419/629-2447, Clarence B. Art, village adm.; 1,049 met.; no gen.; pur. 31,630,487 kWh; rev. $1,489,385. [2]

NEW KNOXVILLE Village Light Dept., Box 246, 45871, 419/753-2160, Bob Scheblo, village adm.; 405 met.; no gen.; pur. 4.4 million kWh; rev. $224,112. [1]

NEWTON FALLS, City of, Light & Power, 52 E. Church St., 44444, 216/872-7711, R. P. Galgoci, supt.; 2,200 met.; no gen.; pur. 25.4 million kWh; rev. $1,223,773. [1]

NILES Water & Light, 34 W. State St., 44446, 216/652-2622, Charles W. Burgess, supt.; 11,039 met.; no gen.; pur. 192.8 million kWh. [1]

OAK HARBOR Util., 228 Park St., 43449, 419/898-3881, Kenley C. Wood, supt.; 1,350 met.; no gen.; pur. 16 million kWh; rev. $858,000. (1911) [1]

OBERLIN Mun. Light & Power System, 289 S. Professor St., 44074-1598, 216/775-1531, Robert Cline, actg. dir.; 2,751 met.; gen. 3,742 kW oil-fired, 8,150 kW dual-fuel, 10,220,200 kWh; sales 63,033,129 kWh; rev. $3,322,179. (1934) [2]

OHIO CITY Mun. Power, Box 248, 45874, 419/965-2255, Betty Spitler, clerk-treas.; 545 met. (1930) [1]

ORRVILLE, City of, Dept. of Pub. Utils.; Box 126, 44667, 216/683-8755, Robert A. Nichols, dir. util.; 5,349 met.; gen. 47,600 kW, 47,000 kW coal, 600 kW oil-fired, 201,786,400 kWh; sales 172,238,202 kWh; rev. $9,043,880. (1917) [2]

PAINESVILLE, City of, Elec. Plant, 7 Richmond St., Box 601, 44077, 216/352-9301, John Leivo, supt.; 9,163 met.; gen. 56,500 kW steam, 137,740,400 kWh; sales 138,454,737 kWh; rev. $7,584,843. (1888) [2]

PEMBERVILLE Bd. of Pub. Affairs, 115 Main St., Box 109, 43450, 419/287-3832, Ernest Wiegman, supt.; 600 met.; no gen. pur. 6.9 million kWh; rev. $138,455. (1914) [1]

PIONEER Bd. of Pub. Affairs, 106 First St., Box 335, 43554, 419/737-2614, T. E. Williams, supt.; 470 met.; no gen.; pur. 6.8 million kWh. (1912) [1]

PIQUA Mun. Power System, 919 S. Main St., 45356, 513/778-2080, H. E. Hastings, dir.; 9,329 met.; gen. 60,000 kW, 40,000 kW coal, 20,000 kW oil turbine, 172,068,720 kWh; sales 175,727,355 kWh; rev. $8,963,732. (1933) [2]

PLYMOUTH, Village of, Elec. Dept., 28 Sandusky St., 44865, 419/687-4331, James Root, adm.; 800 met.; no gen.; pur. 5.6 million kWh; rev. $120,000. (1910) [1]

PROSPECT Mun. Elec. System, Box 186, 43342, 614/494-2100, Leonard G. Ahmay, supt.; 630 met.; no gen.; pur. 6.5 million kWh; rev. $314,329. (1937) [1]

REPUBLIC Bd. of Pub. Affairs, 219 Washington, Box 68, 44867, 419/585-5981, Edwin D. Porter, supt.; 305 met.; no gen.; pur 2.8 million kWh. [1]

RIPLEY Mun. Electricity, 14 N. Third, 45167, 513/392-4377, Carl Judy, supt.; 1,200 met.; no gen.; pur 10.6 million kWh. [1]

ST. CLAIRSVILLE Mun. Utils., 100 Market, Box 537, 43950, 614/695-1410, Dannis Banash, supt; 2,413 met.; no gen.; pur. 33.2 million kWh. [1]

ST. MARYS, City of, 101 E. Spring St., 45885, 419/394-3303, Kenneth L. Hegemann, service and safety dir.; 3,505 met.; gen. 22,500 kW, 12,000 kW coal, 6,000 kW gas turbine, 48,916,700 kWh; sales 90,983,872 kWh; rev. $3,835,436. (1890) [2]

SEVILLE Bd. of Pub. Affairs, 40 W. Main St., 44273, 216/769-2458, Harold Baker, supt.; 1,011 met.; no gen.; sales 15,104 kWh; rev. $903,863. (1914) [2]

SHELBY Dept. of Utils., 23 E. Main St., Box 311, 44875, 419/342-4085, David Burford, util. sec.; 4,335 met.; gen. 40,500 kW, 37,500 kW steam, 3,000 kW eng., 80.6 million kWh; pur. none; rev. $1,995,006. (1892) [1]

SHILOH Mun., Box 242, 44878, 419/896-2011, Robert Adams, supt.; 279 met.; no gen.; pur. 2.7 million kWh. [1]

SOUTH VIENNA Corp., 16 N. Urbana St., 45369, 513/568-4311, Cathie Hurst, clerk; 186 met.; no gen.; sales 2,594 kWh; rev. $126,051. [2]

SYCAMORE Light & Water Dept., 208 S. Pemberton St., 44882, 419/927-4262, Howard E. Feasel, supt.; 450 met.; no gen.; pur. 1 million kWh. (1930) [1]

TIPP CITY Mun. Utils., 3 E. Main St., 45371, 513/667-8424, Steve Husemann, city mgr.; 2,668 met.; no gen.; sales 60,147,133 kWh; rev. $2,867,110. (1897) [2]

TONTOGANY Bd. of Pub. Affairs, Box 153, 43565, 419/823-4233, Ralph Wires, pres., 190 met.; no gen.; pur. 0.2 million kWh. [1]

VERSAILLES Utils., 6 S. Center St., 45380, 513/526-4191; Ramon L. Nickol, supt.; 1,366 met.; no gen.; sales 21,441,604 kWh; rev. $1,148,828. (1901) [2]

WADSWORTH Utils., 145 High St., 44281, 216/335-1521, Peter A. Giacomo, supt.; 7,642 met.; no gen.; rev. $6,760,243. (1903) [2]

WAPAKONETA, City of, Mun., 102 Perry St., 45895, 419/738-7713, Lewis R. Knoch, supt.; 4,216 met.; no gen.; pur. 105,385,000 kWh; rev. $3,138,273. [2]

WAYNESFIELD Bd. of Pub. Affairs, 45896, 419/568-4991, Lon Zimmerman, chair.; 350 met.; no gen.; pur. 4.8 million kWh. [1]

WELLINGTON Mun. Utils., 115 Willard Sq., 44090, 216/647-3827, Robert A. Dupee, dir.; 1,895 met.; no gen.; sales 42,396,692 kWh; rev. $2,464,453. (1908) [2]

WESTERVILLE, City of, Elec. Div., 139 E. Broadway, 43081, 614/890-8540, Harold M. Evans, supt.; 8,459 met.; no gen.; sales 172,119,079 kWh; rev. $9,292,902. (1898) [2]

WHARTON Bd. of Pub. Affairs, Box 266, 43359, 419/458-2121, James E. Kinsey, supt.; 193 met.; no gen.; pur. 1.6 million kWh; rev. $29,353. [1]

WOODSFIELD Bd. of Pub. Affairs, 203 Roy St., 43793, 614/472-3841, Ellis Smithberger, supt.; 1,200 met. [1]

WOODVILLE Light, 212 Bridge St., 43469, 419/849-3031, Ted Bowan, adm.; 838 met.; no gen.; pur. 8.0 million kWh. [1]

YELLOW SPRINGS Mun. Util., 314 Dayton St., 45387, 513/767-7202, Kent Bristol, village mgr.; 1,800 met.; no gen.; pur. 36 million kWh; rev. $1,350,000. [1]

OKLAHOMA

ALTUS, City of Elec. Dept., Box 914, 73521, 405/477-1950, Ron Bourbeau, city adm.; 8,727 met.; no gen.; pur. 115.2 million kWh, rev. $5,323,394. (1929) [1]

AMORITA Light & Power, City Hall, 73719, 405/474-2623, Jerry R. Blevins, mayor; 50 met.; no gen.; pur. 300,000 kWh.

ANADARKO Pub. Wks. Auth., Box 647, 73005, 405/247-2481, Jack Jeuback, City mgr.; 2,812 met.; no gen.; sales 40,189,248 kWh; rev. $1,806,107. [2]

BLACKWELL, Municipal Auth., Box 350, 74631, 405/363-3282, Drake N. Rice, city mgr.; 4,044 met.; no gen.; sales 78,894,757 kWh; rev. $3,252,261. (1913) [2]

BRAMAN, Town of, 308 Broadway, 74632, 405/385-2169, Devern L. Miller, city clerk, 200 met.; no gen.; pur. 1,558,800 kWh; rev. $91,368. (1924) [2]

BURLINGTON, Town of, Box 216, 73722, 405/431-2550, C. L. Fullington, mgr.; 111 met.; rev. $79,467. (1939) [1]

BYRON, Town of, 73723.; James M. Guffy, mayor, 44 met.; no gen.; pur. 412,600 kWh. [2]

CARMEN, Box 98, 73726, 405/987-2321, Loren H. Cramer, elec. supt.

CHELSEA, Town of, Box 48, 74016, 918/789-2315, C. C. Drumheller, elec. supt.; 993 met.; no gen.; sales 9,600,000 kWh. 2

CHEROKEE Mun. Light & Water Dept., City Hall, Box 288, 73728, 405/596-3326; Don Groves, city mgr.; 1,355 met.; gen. 5,560 kW eng.; rev. $328,574.

CLAREMORE Mun. Light & Water Dept., 104 S. Muskogee, Box 249, 74017, 918/341-1325, Don Gilbert, supt.; 5,826 met.; no gen.; pur. 80 million kWh; rev. $1,366,836. 0

COLLINSVILLE Elec. Dept., 106 N. 12th, Box A, 74021, 918/371-2811, John P. Phillips, mayor; 1,300 met.; no gen. 0

COMANCHE, City of, 115 N. Second, 73529, 405/439-8832, Bergl Blair, elec. supt.; 1,000 met.; no gen.; pur. 12.7 million kWh; rev. $350,674. (1912) 0

COPAN Light, Water & Gas System, Box 219, 74022, 918/532-4114, Steve Shedd, elec. supt.; 420 met.; no gen.; pur. 2.6 million kWh; rev. $145,349. (1936) 0

CORDELL, City of, 101 E. Main St., 73632, 405/832-3825, Danny Lenaburg, elec. supt.; 1,700 met.; no gen.; pur. 24 million kWh; rev. $173,219. (1910) 2

CUSHING Mun. Light & Power, City Hall, Box 11, 74023, 918/225-2394, R. G. Annis Jr., city mgr.; 4,308 met.; gen. 18,285 kW eng., 60 million kWh; pur. 4.5 million kWh; rev. $4,751,269. (1937) 1

DUNCAN Power & Light Dept., City Hall, Box 969, 73533, 405/252-0250, Don Howland, mgr.; 6,560 met.; no gen.; pur. 56.4 million kWh; rev. $4,859,593. (1921) 1

EDMOND Mun. Elec. System, 315 SW 33rd St., Box 2870, 73034, 405/348-8830, ext. 291, Dallas D. Graham, city mgr.; 12,718 met.; no gen.; sales 260,000 kWh; rev. $11,746,760. 2

ELDORADO Light Dept., 107 S. Fourth, Box 190, 73537, 405/633-2245, Harold Conwell, supt.; 400 meters; no gen. 2

FAIRVIEW, City of, Box 386, 73737, 405/227-4416, Dixie J. Blackledge, mrg.; 1,619 met.; gen. 2,300 kW, 7,000 kWh cycle; pur. 27,459,200 kWh; rev. $1,327,762. (1908) 2

FORT SUPPLY, Town of, Box 156, 73841, 405/766-3211, Jesse Wilson, power supt.; 260 met.; no gen. 2

FREDERICK, City of Elec. Dept., 200 W. Grand Ave., Box 399, 73542, 405/335-2714, Owen W. Fry, mayor, 2,900 met.; no gen.; pur. 46,281,028 kWh; rev. $1,961,833. (1917) 2

GEARY Mun. Light & Water Dept., Box 125, 73040, 405/884-5466, Chuck Johnson, elec. supt.; 718 met.; no gen.; rev. $404,200. 1

GOLTRY Mun. Lighting, Box 236, 73739, 405/496-2441, J. Gary Voss, elec. supt.; 158 met.; no gen.; pur. 2,556,400 kWh, rev. $81,004. 2

GRAND RIVER DAM AUTHORITY, 707 S. Wilson, Drawer G, Vinita, 74301, 918/256-5545, James D. Pendergrass, gen. mgr.; 66 met.; gen. 1,038,000 kW, 210,000 kW hydro, 490,000 kW coal, 50,000 kW gas, 288,000 kW pumped storage, sales 3,096,996 kWh; rev. $101,449,763. (1935) 2

GRANITE, Town of, Box 116, 73547, 405/535-2116, E. J. Hahn, city clerk, utility supt.; 560 met.; no gen.; pur. 5,960,640 kWh; rev. $205,673. (1920) 2

HOMINY Elec. Dept., 314 W. Third St., Box 219, 74035, 918/885-2164, Allen Bates, mgr.; 1,878 met.; no gen.; rev. $276,614. 2

KAW CITY, City of, Box 26, 74641, 405/269-2525, Velda Rundle, city clk., 142 met.; no gen.; pur. 1,754,484 kWh; rev. $16,962. 2

KINGFISHER, City of, 301 N. Main, 73750, 405/375-3705, Vernie Snow, mgr.; 2,000 met.; gen. 11,200 kW, 2,500 kW steam, 8,700 kW eng., 18.6 million kWh; pur. none; rev. $565,122. (1900) 0

LAVERNE Mun. Elec. Light Plant, Box 4301, 73848, 405/921-5121, Jay D. McCoy, elec. supt.; 770 met.; gen. 1,100 kW eng. 0

LEXINGTON Elec. Dept., Drawer D, 73051, 405/527-3179, Chuck Tiller, elec. supt.; 900 met.; no gen.; pur. 27,000 kWh; rev. $253,000. (1951) 0

LINDSAY Elec. Dept., 308 S. W. Second, Box 708, 73052, 405/756-4900, Kenneth I. McCabe, city mgr.; 1,470 met.; gen. 9,974 kW eng., 18.8 million kWh; pur. none; rev. $412,770. (1915) 0

MANCHESTER Light & Power Dept., Box 5, 73758, 405/694-2340, L. E. Toole, elec. supt. 0

MANGUM Elec. Dept., 201 N. Oklahoma, 73554, 405/782-2250, Phillip Paxton, mgr.; 2,000 met.; gen. 7,600 kW eng.; pur. none; rev. $406,674. 0

MANITOU Light Dept., 73555, 405/397-2241, Genevieve Meadows, city clerk; 300 met. 2

MANNFORD Elec. Dept., Box 327, 74044, 918/865-4314, W. P. Adkins, pub. works dir.; 405 met.; no gen.; rev. $110,911. 0

MARLOW Light & Water Dept., 318 W. Main St., Box 113, 73055, 405/658-5401, 1,735 met.; gen. 5,642 kW eng., rev. $308,673.

MIAMI Util. Dept., 129 Fifth Ave., N.W., Box 309, 74354, 918/542-8478, John C. Woody, gen. mgr.; 6,322 met.; no gen.; pur. 115.9 million kWh; rev. $5,434,771. (1910) 1

MOORELAND, Town of, Light & Power, Box 157, 73852, 405/994-5925, Dean Hensley, supt.; 705 met.; no gen.; sales 8,193,600 kWh; rev. $299,433. (1908) 2

NEWKIRK Mun. Utils., Box 469, 74647, 405/362-2117, Harold J. Harris, city mgr.; 1,300 met.; no gen.; pur. 13,000,000 kWh; rev. $776,500. (1918) 2

OKEENE Light & Water Dept., 213 N. Main St., Drawer F, 73763, 405/822-3197, Don Rauh, supt.; 600 met.; gen. 3,000 kW eng.; rev. $207,312. 0

OLUSTEE, Town of, Box 330, 73560, 405/648-2288, Kenneth Reynolds, elec. supt.; gen. 0

ORLANDO Light System, Box 27, 73073, 405/455-3825, Alta Branen, mayor; no gen.

PAWHUSKA Light & Water Plant, 700 W. Tenth St., Box 539, 74056, 918/287-3260, Harvey Massey, city mgr.; 2,672 met.; gen. 8,700 kW dual-fuel, 120,800 kWh; sales 30,988,998 kWh; rev. $1,625,753. (1907) 2

PAWNEE Mun. Light & Water Dept., 614 Kansas St., Box 130, 74058, 918/762-2658, Tommy Creager, elec. supt.; 1,200 met.; no gen.; pur. 13 million kWh; rev. $261,476.

PERRY Water & Light Dept., Box 111, 73077, 405/336-4241, Charles J. Bezdicek, supt.; 2,900 met.; gen. 5,050 kW eng., 11.5 million kWh; pur. 24.9 million kWh; rev. $665,920. (1903)

PONCA CITY City Light Dept., Box 1450, 74602, 405/765-6653, Charles L. Silvy, dir., utils.; 16,435 met.; gen. 87,000 kW, 26,000 kW dual-fuel, 61,000 kW gas, 16,675,000 kWh; pur. 229,261,000 kWh; rev. $11,169,301. (1914) 2

POND CREEK Water & Light Dept., Box 45, 73766, 405/532-4915, Richard Dillon, elec. supt.; 552 met., no gen.; pur. 4 million kWh; rev. $114,930.

PRAGUE Mun Utils., Box 648, 74864, 405/567-2601, Harold Behrnes, pub. wks. supt., 1,100 met.; no gen.; pur. 18,400,890 kWh; rev. $854,785. (1902) 2

PRYOR Mun. Util. Bd., Box 249, 74361, 918/825-2100, Bob Pierson, gen. mgr.; 3,950 met.; no gen.; pur. 59,500,000 kWh; rev. $3,149,886. (1951) 2

PURCELL Pub. Works Auth., 230 W. Main, Box 71, 73080, 405/527-6561, Royce Hunter, city mgr., 4,600 met.; no gen.; pur. 38,788,800 kWh; rev. $1,386,155. 2

RYAN Mun. Light & Water Plant, Box 489, 73565, 405/757-2406, Homer Ryan, city mgr.; 515 met.; no gen.; pur. 5,706,792 kWh; rev. $264,421. 2

SALLISAW Light & Power Dept., 111 N. Elm, Drawer C, 74955, 918/775-6241, James R. Hudgens, city mgr.; 2,898 met.; no gen.; pur. 72,113,100 kWh; rev. $2,834,407. (1914) 2

SKIATOOK Elec. Dept., City Hall, Box 399, 74070, 918/396-2797, Monte Gondles Jr., adm. asst.; no gen.; pur. 21.6 million kWh.

SOUTH COFFEYVILLE Mun. Elec. System, Drawer C, 74072, 918/225-6045, Carl Yates, mayor; 350 met.; no gen.; pur. 2 million kWh; rev. $158,544. 2

SPIRO Mun. Improvement Auth., 131 S. Main St., 74959; 918/962-2470, Stearl Nelson, mayor; 925 met.; no gen.; rev. $397,341. 2

STILLWATER, City of, Box 1449, 74074, 405/372-3292, Karl Stadler, dir. elec. utils; 12,913 met.; gen. 23,000 kW gas, sales 258,721,000 kWh; rev. $10,704,000. (1900) 2

STILLWELL Util. Dept., Box 840, 74960, 918/696-3400, Page G. Arnall, supt. util.; 1,300 met.; no gen.; sales 23,032,999 kWh, rev. $1,612,318. (1952) 2

STROUD Water & Light Dept., Drawer K, 74079; 918/968-2890, Bruce Stone, mgr.; 1,360 met.; no gen.; pur. 20,677,998 kWh; rev. $1,189,000. (1927) 2

TAHLEQUAH Pub. Wks. Auth., Box 29, 74464, 918/456-2564, J. M. Hicks, gen. mgr.; 4,167 met.; no gen.; pur. 68,805,561 kWh; rev. $3,413,628. (1923) 2

TECUMSEH Util. Authority, 114 N. Broadway, 74873, 405/598-2188, Wm. Charles Martin, city mgr.; 1,907 met.; no gen.; sales 20,779,871 kWh; rev. $998,196. 2

TONKAWA Mun. Power Plant, 117 S. Seventh, Box 467, 74653, 405/628-2508, J. E. Ditmore, mgr.; 1,617 met.; gen. 5,500 kW eng.. 12.5 million kWh; pur. 6 million kWh; rev. $387,030. (1925) 0

WAGONER Pub. Wks. Auth., 231 Church St., Box 406, 74467, 918/485-2554, Elvin E. Neel, mgr.; 3,353 met.; no gen.; sales 45,000,000 kWh; rev. $2,428,425. [2]

WALTERS Mun. Elec. Light & Water Dept., 129 E. Colorado St., Box 485, 73572, 405/875-3337, Buddy Veltema, city mgr.; 1,375 met.; no gen.; pur. 14.4 million kWh; rev. $366,051. (1925) [0]

WATONGA Water & Light System, Weigel St., Box 564, 73772, 405/623-7353, Kenneth Marshall, elec. supt.; 1,825 met.; no gen.; rev. $491,125. [0]

WAYNOKA Light & Power, 201 E. Cecil St., 73860, 405/824-2261, Ray Gamble, elec. supt.; 848 met.; no gen.; pur. 7.5 million kWh. [0]

WELEETKA, 74880. **(Municipal distribution system leased to Public Service Co. of Oklahoma.)**

WETUMKA Light Dept., 202 N. Main, 74883, 405/452-3153, Carl Sanders, supt.; 800 met.; no gen.; pur. 4 million kWh; rev. $100,084. [0]

WYNNEWOOD Water & Light Dept., 207 W. Kerr Blvd., Box 176, 73098, 405/665-4141; Ralph Nelms, mgr.; 1,237 met.; no gen.; pur. 12.5 million kWh; rev. $570,185. [1]

YALE City of Elec. Co., 209 N. Main, 74085, 918/387-2121, Clarence Embry, city mgr.; 9,487 met.; no gen.; pur. 4.3 million kWh; rev. $366,759. [2]

OREGON

ASHLAND, City of, 20 E. Main St., 97520, 503/482-3211, B. J. Krug, supt.; 6,582 met.; no gen.; pur. 122,947,587 kWh; rev. $2,821,587. (1908) [2]

BANDON, City of, Box 67, 97411, 503/347-2437, Ben M. McMakin, city mgr.; 2,291 met.; no gen.; sales 49,579,368 kWh; rev. $1,060,285. (1921) [2]

CANBY Util. Bd., Box 470, 97013, 503/266-1156, Fred W. Egger, mgr.; 3,281 met.; no gen.; sales 93,153,771 kWh; rev. $1,511,614. (1922) [2]

CASCADE LOCKS, City of, Box 308, 97014, 503/374-8484, Ken Hobson, city admin.; 754 met.; no gen.; sales 22,002,267 kWh; rev. $509,675. (1939) [2]

CENTRAL LINCOLN PEOPLE'S UTILITY DISTRICT, 255 S. W. Coast Highway, Box 1126, Newport, 97365, 503/265-5335, Dan Westlind, gen. mgr.; 25,000 met.; no gen.; pur. 1,249,980,997 kWh; rev. $18,221,765. (1940) [2]

CLATSKANIE PEOPLE'S UTILITY DISTRICT, Box 216, Clatskanie, 97016, 503/728-2163, Liston Darby, gen. mgr.; 3,057 met.; no gen.; pur. 731,255,190 kWh; rev. $7,132,304. (1940) [2]

COLUMBIA RIVER PEOPLE'S UTILITY DISTRICT, Box 1193, St. Helens, 97051, 503/397-6568 or -3118, Steve Spinden, pres.; R. Tarbell, sec.-treas. **(authorized by voters in 1981 to issue revenue bonds; not yet operating).** [2]

DRAIN, City of, Box 158, 97435, 503/836-2417, Robert A. Gray, city admr.; 620 met.; no gen.; pur. 25,917,000 kWh; rev. $527,739. (1940) [2]

EMERALD PEOPLE'S UTILITY DISTRICT, 84899 Tillicum Ave., Pleasant Hill, 97401, 503/746-1583, Lionel Topaz, gen. mgr. **(Authorized in 1978, bonding authority approved in 1980, not yet operating).** [2]

EUGENE Water & Elec. Bd., 500 E. Fourth Ave., Box 10148, 97440, 503/484-2411, Keith Parks, gen. mgr.; 63,042 met.; gen. 422,600 kW, 74,600 kW hydro, 24,000 kW oil, 324,000 kW nuclear, 702,908,800 kWh; sales 2,372,151 kWh; rev. $47,340,203. (1911) [2]

FOREST GROVE, City of, Light & Power Dept., Box 326, 97116, 503/357-7151, Doug Sleeth, dir., light and power dept.; 5,931 met.; no gen.; pur. 151,436,383 kWh; rev. $2,375,798. (1896) [2]

McMINNVILLE Water & Light Dept., 130 N. Baker St., 97128, 503/472-6158, Alan H. Jones, gen. mgr.; 8,108 met.; no gen.; sales 331,115,823 kWh; rev. $5,213,489. (1889) [2]

MILTON-FREEWATER City Light & Power, 722 S. Main, Box 6, 97862, 503/938-5533, George N. McRae, elec. supt.; 3,905 met.; no gen.; pur. 110.8 million kWh; rev. $1,083,852. (1890) [0]

MONMOUTH, City of, 151 W. Main St., 97361, 503/838-0722, Ron Rombalski, city mgr.; 2,494 met.; no gen.; sales 52,701,325 kWh; rev. $990,694. (1940) [2]

NORTHERN WASCO COUNTY PEOPLE'S UTILITY DISTRICT, 121 E. 2nd St., The Dalles, 97058, 503/296-2227, Harold Haake, mgr.; 8,460 met.; no gen.; sales 202,067,204 kWh; rev. $4,880,248. (1939) [2]

SPRINGFIELD Util. Bd., 250 N. A. St., Box 300, 97477, 503/746-8451, Steve L. Loveland, gen. mgr.; 20,339 met.; no gen.; sales 669,123,793 kWh; rev. $13,624,655. (1950) [2]

TILLAMOOK PEOPLE'S UTILITY DISTRICT, Box 433, Tillamook, 97141, 503/842-2535, Jack H. Madison, mgr.; 15,707 met.; no gen.; sales 327,137,000 kWh; rev. $7,425,000. (1933) [2]

PENNSYLVANIA

BERLIN Mun. Elec. Sys., 700 North St., 15530, Kerry B. Claycomb, exec. Bor. secy.; 903 met.; no gen.; pur 13,521,600 kWh; rev. $774,075. [2]

BLAKELY Borough Mun. Light Plant, 800 Main St., Peckville, Pa., 18452, Harold J. McCusker Jr.; 2,945 met.; no gen.; pur. 30.8 million kWh; rev. $1,418,050. (1895) [2]

CATAWISSA Bor. Light, 118 N. 3rd St., Box 44, 17820, 717/356-2561, C. L. Linn; 760 met.; no gen.; pur. 10,200,000 kWh; rev. $424,000. (1928) [2]

CHAMBERSBURG Elec. Dept., 100 S. Second St., 17201, 717/264-5151, Julio D. Lecuona, mgr. of utils.; 9,207 met.; gen. 4,000 kW dual fuel, 823,500 kWh; sales 174,829,345 kWh; rev. $6,739,008. (1889) [2]

DUNCANNON Borough, 428 High St., Box 9, 17020, 717/834-4311, Thomas Evans, borough mgr.; 834 met.; no gen.; pur. 7,191,000 kWh; rev. $307,243. (1898) [2]

EAST CONEMAUGH Mun. Elec. Dept., 355 First St., Borough Bldg., 15909, 814/535-1977, John Salem, meter reader, 808 met.; no gen.; pur. 5,116,000 kWh; rev. $289,443. [2]

ELLWOOD CITY Mun. Elec. Dept., 525 Lawrence Ave., 16117, 412/758-5576, Robert McClelland, supt.; 4,281 met.; no gen.; pur 48,376,000 kWh; rev. $1,446,640. (1901) [2]

EPHRATA, Borough of, Elec. Dept., 114 E. Main St., 17522, 717/733-1277, L. Victor Dickinson, mgr.; 5,050 met.; no gen.; pur. 84 million kWh; rev. $3,450,000. (1902) [0]

GIRARD Mun. Light Plant, Box 146, 16417, 714/774-3012, R. M. Hanson supt.; 1,020 met.; gen. 4,139 kW eng., 12 million kWh; pur. 3 million kWh; rev. $488,000.

GOLDSBORO Util. Dept., Etters, 17319, Lee Fishol, borough sec.; 218 met.; no gen.; pur. 2 million kWh; rev. $61,000.

GROVE CITY Borough Elec., 1328 W. Main St., 16127, 412/458-7060, Peter L. Holzmeister, bor. mgr.; 2,722 met.; no gen.; sales 37,144,569 kWh; rev. $2,074,090. (1906) [2]

HATFIELD Mun. Elec. Plant, Broad and Cherry Sts., Box 190, 19440, 215/855-2087, David L. Leidy, borough sec.; 1,071 met.; gen. 2,685 kW eng., 6 million kWh; pur. 7 million kWh; rev. $553,000.

HOOVERSVILLE Borough, Box 176, 15936, 814/798-8001, Eileen P. Granoas, borough sec.; 387 met.; no gen.; pur. 2,753,600 kWh; rev. $172,318. [2]

KUTZTOWN, Borough of, 211-213 W. Main St., 19530-1697, 215/683-6131, Carl H. Bortz, borough sec.; 1,841 met.; no gen.; sales 35,773,141 kWh; rev. $2,451,908. [2]

LANSDALE, Borough of, Elec. Dept., 421 W. Main St., 19446 215/368-1691, Edward W. Olander, supt.; 6,731 met.; no gen.; sales 110,000 kWh. (1902) [2]

LEHIGHTON Borough Light & Power, Municipal Bldg., 18235, 215/377-4002, Mortimer L. Smedley, Jr., mgr.; 3,380 met.; no gen.; sales 32,866,822 kWh; rev. $1,606,846 (1940) [2]

LEWISBERRY, Borough of, 17339, William Keener, borough sec.; 125 met.; no gen.; pur. 1 million kWh; rev. $34,000.

MIDDLETOWN Royalton Borough, Burd & Dock Sts., 17057, 717/944-4831, B. J. Young, Bor. secy.; 3,474 met.; no gen.; pur. 2,270,400 kWh; rev. $149,245. (1913) [2]

MIFFLINBURG Light Dept., 333 Chestnut St., 17844, 717/966-1013, Walter Katherman, Bor. mgr.; 1,561 met.; no gen.; pur. 33,576,000 kWh; rev. $1,328,089. (1925) [2]

MONT ALTO Mun. Elec. Dept., 17237, Robert T. Shank, borough sec.; 481 met.; no gen.; pur. 2 million kWh; rev. $157,479. [1]

NEW WILMINGTON, Borough of, 140 W. Neshannock Ave., 16142, 412/946-8167, Edward Garrett, borough supt.; 706 met.; no gen.; pur. 11,392,000 kWh; rev. $616,790. [2]

OLYPHANT Borough Elec. Plant, Willow Ave., 18447, 717/489-3211, John Cecere, plant frmn.; 1,590 met.; no gen.; pur. 23,596,200 kWh; rev. $1,078,884 [2]

PERKASIE Borough Elec. Light Dept., 120 N. 7th St., Box 275, 18944, 215/257-5065, Edward W. Pearl, supt.; 2,632 met.; no gen.; pur. 33,656,000 kWh; rev. $1,565,630. (1900) [2]

PITCAIRN Mun. Elec. Light Plant, 320 Center Ave., 15140, 412/372-3116, George H. Myers, mgr.; 1,910 met.; no gen.; pur. 9 million kWh; rev. $543,842. (1901) 1

QUAKERTOWN Elec. Dept., 15-35 N. 2nd St., 18951, 215/536-5001, Nicolas Luca, Bor. mgr.; 4,200 met.; no gen.; pur. 85,000,000 kWh; rev. $2,950,000. (1904) 2

ROYALTON Elec. Light Dept., Burd and Dock Sts., Middletown, 17057, 717/944-4831, B. J. Young, borough sec.; 338 met.; no gen.; pur. 2.3 million kWh; rev. $149,245 (1913) 2

ST. CLAIR Borough Elec. Light Dept., 39 N. Second St., 17970, 717/429-0640, Donald C. Hosler, gen. supt., 2,070 met.; no gen.; sales 11,138,000 kWh; rev. $609,996. (1920) 2

SCHUYLKILL HAVEN, Borough of, 39 Dock St., 17972, 717/385-2841, R. L. Waller, borough mgr.; 2,736 met.; no gen.; pur. 40,504,400 kWh; rev. $1,698,862. 2

SMETHPORT Elec. Dept., 412 Water St., 16749, 814/887-5815, Robert E. Miller, supt.; 950 met.; no gen.; pur. 9,755,600 kWh; rev. $529,947. 2

SUMMERHILL Borough Mun. Light Plant, Box 289, 15958, 814/495-5610, Janet S. Thomas, sec./treas.; 300 met.; no gen.; pur. 2,373,600 kWh; rev. $102,368. (1933 Est.) 2

WAMPUM Borough Elec. Dept., Box 65, 16157, 412/535-8241, Charles Kelly, maint. supt.; 400 met.; no gen.; pur. 3,275,900 kWh; rev. $150,000. (1910) 2

WATSONTOWN Borough Elec. Dept., Fourth and Main Sts., Box 273, 17777, 717/538-1000, Robert Barr, supt.; 1,050 met.; no gen.; pur. 12,992,900 kWh; rev. $642,500. 2

WEATHERLY Borough Elec. Dept., 10 Wilbur St., 18255, 717/427-8640, Beverly E. Knepper, borough mgr.; 1,106 met.; no gen.; pur. 22,552,000 kWh; rev. $918,440. 2

ZELIENOPLE Mun. Elec. Dept., 111 W. New Castle St., 16063, 412/452-7260, Charles M. Mick, supt.; 1,607 met.; no gen.; pur. 19.9 million kWh; rev. $1,050,860. 1

RHODE ISLAND

PASCOAG FIRE DISTRICT, 33 S. Main St., Pascoag, 02859, 401/568-6222, Howard C. Peters, gen. mgr.; 2,923 met.; no gen.; sales 20,431,484 kWh; rev. $1,808,726. (1932) 2

SOUTH CAROLINA

ABBEVILLE Water & Elec. Plant, Box 639, 29620, 803/459-5058, Mike Moorhead, mgr., 3,000 met.; gen. 4,650 kW, 3,250 kW hydro, 1,400 kW eng., 11 million kWh; pur. 32 million kWh; rev. $1,500,000. (1905) 0

BAMBERG Bd. of Pub. Works, Box 300, 29003, 803/245-5128, James B. Roberts, supt.; 1,547 met.; no gen.; sales 36,201,818, kWh; rev. $1,460,105. (1905) 2

BENNETTSVILLE Elec., Water & Gas, Box 1036, John Corry Rd., 29512, 803/479-7192, Jimmy L. McColl, supt.; 4,483 met.; no gen.; pur. 76,921,000 kWh; rev. $3,562,651. (1903) 2

CAMDEN, City of, 1000 Lyttleton St., 29020, 803/432-2421, B. M. Paulling, city mgr., 8,331 met.; no gen.; sales 117,881,785 kWh; rev. $6,540,346. (1947) 2

CLINTON Combined Util. System, 219 Gary St., Drawer 748, 29325, 803/833-0504, O. B. McCall, supt.,; 3,390 met.; no gen.; sales 97,248,092 kWh. 2

DUE WEST Comm. of Pub. Works, Box 128, 29639, 803/379-2385, C. H. Hawthorne, supt.; 336 met.; no gen.; rev. $68,686. 2

EASLEY Combined Util. System, Box 605, 29640, 803/859-4013, Richard S. Hale, mgr.; 7,846 met.; no gen.; sales 139,749,571 kWh; rev. $5,637,853. (1910) 2

GAFFNEY Bd. of Pub. Works, 210 E. Frederick St., 29340, 803/487-7171, Houston F. Crater Jr., interim exec. dir.; 90,893 met.; no gen.; sales 123,381,385 kWh; rev. $5,341,912. (1907) 2

GEORGETOWN Light & Water Dept., Box 1146, 29440, 803/546-5632, W. L. Hewitt, util., mgr.; 4,034 met.; no gen.; pur. 93,555,506 kWh; rev. $3,789.960. 2

GREENWOOD Comm. of Pub. Works, Box 549, 29648, 803/223-8571, Clarence E. Grubb, mgr.; 10,421 met.; no gen.; sales 167,612,732 kWh; rev. $5,807,240. (1896) 2

GREER Comm. of Pub. Works, 201 W. Poinsett St., Box 216, 29651, 803/877-3381, Kenneth Smith, mgr.; 6,910 met.; no gen.; pur. 93.7 million kWh; rev. $4,007,469. (1914) 1

LAURENS Comm. of Pub. Works, Box 349, 29360, 803/984-2576, Sam R. Wallace, mgr.; 4,862 met.; no gen.; pur. 75.9 million kWh. (1922) 2

McCORMICK Comm. of Pub. Works, Box 656, 29835, 803/465-2224, J. Eakin Cochran, supt.; 898 met.; no gen.; sales 14,528,842 kWh; rev. $667,629. (1926) 2

NEWBERRY, City of, Drawer 538, 29108, 803/276-0471, Steve D. Reeves Jr., utils. dir.; 4,346 met.; no gen.; pur. 106,931,880 kWh; rev. $3,776,558. 2

ORANGEBURG Dept. of Pub. Utils., 195 Russell S.W., Box 1057, 29115, 803/535-2821, Ted M. Johnson, Jr., mgr.; 20,042 met.; no gen.; pur. 476,272,000 kWh; rev. $19,652,355. (1890) 2

PROSPERITY, Town of, McNeary St., Box 36, 29127, 803/364-2616, J. Walter Hamm, mayor; 398 met.; no gen. (1920) 0

ROCK HILL, City of, Box 11706, 29730, 803/328-6171, C. A. Owen, utils. dir.; 15,740 met.; no gen.; sales 321,296,000 kWh; rev. $14,230,757. (1910) 2

SENECA Light & Water Plant, Box 773, 29678, 803/882-8359, H. Jerry Balding, dir. of utils.; 4,435 met.; no gen.; pur. 82.6 million kWh; rev. $3,096,979. (1907) 1

SOUTH CAROLINA PUBLIC SERVICE AUTHORITY (Santee Cooper), Box 398, Moncks Corner, 29461. 803/899-2121, William C. Mescher, pres.; 53,432 met.; gen. 1,965,000 kW, 1,662,000 kW steam (1,556,000 kW coal, 92,000 kW oil), 177,000 kW oil-fired eng., 10,000 kW gas, 130,000 kW hydro, 9,064,758 kWh; sales 8,869,677,890; rev. $244,881,425. (1934) 2

UNION, City of, Drawer K, 29379, 803/427-0282, T. D. Sherbert Jr., dir.; 6,487 met.; no gen.; sales 87,893,662 kWh; rev. $3,892,448. (1897) 2

WESTMINSTER Comm. of Pub. Works, Box 216, 29693, 803/647-5961, Sam Stribling, supt.; no gen.

WINNSBORO, Town of, Box 209, 29180, 803/635-4041, Philip D. Barnes, town mgr.; 2,522 met.; no gen.; sales 40,621,966 kWh; rev. $2,641,164. (1910) 2

SOUTH DAKOTA

ARLINGTON Mun. Light Plant, 57212, Wayne Reit, supt.; 496 met.; gen. 800 kW eng.

AURORA Mun. Elec., 57002, 605/693-3752, Elaine Waples, fin. off.; 226 met.; no gen.; pur. 2,866,185 kWh; rev. $107,008. (1968) 2

BADGER Elec. Light Dept., Box 84, 57214, 605/983-5385, Myron Anderson pres.; 75 met.; no gen.; pur. 1,200,000 kWh. (1956) 2

BERESFORD, City of, 101 N. Third St., 57004, 605/763-2008, Terry L. Peters, supt.; 928 met.; no gen.; pur. 13,416,000 kWh; rev. $474,529. (1950) 2

BIG STONE CITY Mun. Elec. Dept., 57216, Box 246, 605/862-8128, Roger Hegge, town chair.

BROOKINGS Mun. Utils. 525 Western Ave., Box 588, 57006, 605/692-6325, Andy Jensen, utils. mgr.; 7,244 met.; sales 113,000,000 kWh; rev. $3,227,000. (1899) 2

BRYANT City Power & Light, 57221, 605/625-5221, Garry Ludwig, supt.; 212 met.; gen. 200 kW eng.; pur. 1.6 million kWh; rev. $79,000. (1958) 1

BURKE Maintenance Office, Box 312, 57523, 605/775-2692, Richard N. Bailey, supt. of utils.; 423 met.; no gen.; pur. 6,169,900 kWh; rev. $171,144. (1936) 2

COLMAN, City of, Box 54, 57017, 605/534-3611, Donald Hilmoe, mayor; 250 met.; no gen.; pur. 6,000,000 kWh; rev. $210,427. (1965) 2

ELK POINT, City of, Box 280, 57025, 605/356-2631, Robert L. Eslick, supt.; 700 met.; no gen.; sales 9,099,710 kWh; rev. $444,000. (1918) 2

ESTELLINE Light & Power, Box 278, 57234, 605/873-2388, Donald A. Seeklander, city engr.; 340 met.; no gen.; sales 4,843,000 kWh; rev. $207,409. 2

FAITH Mun. Light Plant, 57626, 605/967-2511, Donn Dupper, supt.; 245 met.; gen. 950 kW eng.; pur. 2.5 million kWh.

FLANDREAU, City of, 136 Second Ave., E., 57028, 605/997-2671, Don Johnson, supt.; 1,288 met.; no gen.; pur. 15,851,000 kWh; rev. $477,332. 2

FORT PIERRE Mun. Elec., Box 637, 57532, 605/223-2508, James Klemann, city supt.; 725 met.; no gen.; pur. 13,500,000 kWh; rev. $385,000. (1900) 2

GROTON, City of, Light Dept., Box 121, 57445, 605/397-2690, David Anderson, supt.; 532 met.; no gen.; pur. 9,196,128 kWh. (1921) 2

HECLA Light & Power Plant, 57446, 605/994-2080, Delwyn Tisher, supt.; 250 met.; gen. 200 kW eng.

HOWARD, City of, Box 157, 57349, 605/772-4391, Ed Lutz, supt., 621 met.; no gen.; pur. 90,028 kWh; rev. $217,734. 2

LANGFORD, Town of, 57454, 605/493-4441, Bruce A. Likness, supt.; 274 met.; no gen.; pur. 2.5 million kWh; rev. $69,075. 2

MADISON Mun. Utils., 116 W. Center St., Box 308, 57042, 605/256-4872, Virgil Schoberl, supt.; 2,859 met.; gen. 3,186 kW eng.; pur. 32.4 million kWh; rev. $1,315,857. (1922) 1

McLAUGHLIN Mun. Power System, 57642, 605/823-4428, Edward Walker, mayor; 385 met.; no gen.; pur. 6,372,923 kWh; rev. $164,786. (1969) 2

MILLER, City of, Light & Power, 120 W. Second St., 57362, 605/853-2705, Merle Dirksen, supt.; 1,009 met.; no gen.; sales 17,118,000 kWh; rev. $417,608. (1904) 2

ONIDA Mun. Light & Water Works, Box 72, 57564, 605/258-2231, Jerry Culey, supt.; 322 met.; no gen. (standby only); pur. 69,753,000 kWh; rev. $81,857. (1926) 2

PARKER, City of, Box 265, 57053, Frisco D. Petersen, fin. officer; 547 met.; gen. 1005 kW eng.; rev. $158,527. 1

PIERRE Mun. Utils., 222 E. Dakota, 57501, 605/224-7341, Dave Padgett, dir. pub. wks.; 5,357 met.; no gen.; sales 98,604,466 kWh; rev. $2,581,242. (1887) 2

PLANKINTON Light & Power Plant, 57368, 605/942-5361, Edwin Lutz, light supt.; 367 met.; no gen.; pur. 6,938,668 kWh; rev. $175,477. (1936) 2

SIOUX FALLS Mun. Light and Power Dept., 2000 N. Minnesota Ave., 57104, 605/339-7150, Frank W. Josten, light dept. mgr.; 1,541 met.; no gen.; sales 43,885,815 kWh; rev. $1,407,189. (1904) 2

TYNDALL Light & Water Plant, Box 29, 57066, 605/589-3481, Alfred J. Novotny, supt.; 580 met.; no gen.; pur. 9,332,623 kWh; rev. $297,863. (1911) 2

VERMILLION, City of, 25 Center St., 57069, 605/624-2668, Carl Weinaug, city mgr.; 3,244 met.; gen. 2,455 kWh; pur. 35,468,418 kWh; rev. $1,396,568. (1915) 2

VOLGA Mun. Light & Power, 108 Kasson Ave., 57071, 605/627-2341, Donald Brintnall, supt.; 600 met.; gen. 550 kW eng.; pur. 5.1 million kWh; rev. $110,000. (1941)

WATERTOWN Mun. Utils., 901 Fourth Ave., S.W., 57201, 605/866-5733, J. R. Harty, supt.; 7,701 met.; no gen.; pur. 126,664,000 kWh; rev. $3,979,699. (1920) 2

WESSINGTON SPRINGS Mun. Light & Power, 57382, 605/539-1691, Lawrence Myers, supt.; 560 met.; no gen.; pur. 7.8 million kWh; rev. $280,000. (1914) 1

WHITE, City of, 57276, 605/629-3521, Orvin Anderson, supt.; 218 met.; no gen. (1978)

WINNER Mun. Utils., 217 E. Third St., 57580, Clair Turgeon, supt.; 1,850 met.; no gen.; pur. 29,636,616 kWh; rev. $753,884. (1948) 2

(Oglala Sioux Tribal Council, Pine Ridge, S.D., and Oglala Sioux Housing Authority, Pine Ridge, S.D., own electric systems which are operated under lease agreements by Nebraska Public Power District, Columbus, Neb.)

TENNESSEE

(All local publicly owned electric utilities in Tennessee are distributors of Tennessee Valley Authority power and purchase all of their power requirements from TVA.)

ALCOA Utils Bd. (formerly Blount Elec. Sys.,) 264 Rankin Rd., Box 610, 37701, 615/982-4190, David W. Switzer, mgr.; 14,793 met.; no gen.; sales 320,431,823 kWh; rev. $12,598,757. (1956) 2

ATHENS Utils. Bd., 100 New Englewood Rd., Box 689, 37303, 615/745-4501, George H. Usry, gen. mgr.; 10,005 met.; sales 377,352,688 kWh; rev. $15,729,383. (1939) 2

BENTON COUNTY BD. OF PUBLIC UTILITIES, 115 S. Church St., Camden, Box 445, 38320, 901/584-8251, Glenn C. Pafford, mgr.; 9,895 met.; pur. 170.4 million kWh; rev. $4,829,111. (1940) 1

BOLIVAR Elec. Dept., Box 188, 38008, 901/658-5257, Beryl F. Williams, mgr.; 8,442 met.; sales 175,638,155 kWh; rev. $7,129,068. (1936) 2

BRISTOL Elec. System, Box 549, 37621, 615/968-1526, R. Michael Browder, gen. mgr.; 23,769 met.; sales 596,137,972 kWh; rev. $23,340,437. (1945) 2

BROWNSVILLE Util. Dept., Box 424, 38012, 901/772-1213, John F. Sharpe, mgr.; 3,938 met.; sales 103,434,601 kWh; rev. $4,034,895. (1939) 2

CARROLL COUNTY Elec. Dept., 103 W. Paris St., Huntingdon, 38344, 901/986-8284, J. B. McMillin, mgr.; pur. 294,241,400 kWh. (1938) 2

CHATTANOOGA Elec. Power Bd., 6th & Market Sts., 37402, 615/629-3300, Kenneth S. Baxter, gen. mgr.; 125,707 met.; sales 4,899,054 kWh; rev. $204,867,690. (1935) 2

CLARKSVILLE Dept. of Elec., 200-202 S. Second St., Box 1007, 37040, 615/648-8151, Dalton B. Smith, gen. mgr.; 20,356 met.; sales 495,718,913 kWh; rev. $21,537,116. (1939) 2

CLEVELAND Utils., 2450 Guthrie Drive, N.W., Box 2730, 37311, 615/472-4521, M. E. Beavers, gen. mgr.; 18,764 met.; sales 604,590,221 kWh; rev. $19,088,766. (1939) 2

CLINTON Utils. Bd., 1001 Moore St., Box 296, 37716, 615/457-9232, E. H. Ross, mgr.; 19.654 met.; rev. $18,163,120. (1939) 2

COLUMBIA Power System, Box 379, 38401, 615/388-4833, William M. Carroll III, mgr.; 15,035 met.; sales 404,712,762 kWh; rev. $15,457,748. (1939) 2

COOKEVILLE Elec. Dept., 45 E. Broad, Box 998, 38501, 615/526-9591, W. R. Holland, supt.; 9,040 met.; pur. 317,771,301 kWh; rev. $11,955,971. (1904) 2

COVINGTON Elec. System, Box 488, 38019, 901/476-7104, Leo Wingate Jr., mgr.; 2,817 met.; sales 106,782,473 kWh; rev. $4,387,270. (1904) 2

DAYTON Elec. Dept., Box 226, 37321, 615/775-1817, Paul Hill, supt.; 5,799 met.; pur. 150.7 million kWh; rev. $3,792,622. (1927) 0

DICKSON Elec. Dept., 121 S. Main St., Box 627, 37055, 615/446-9051, Ernest R. Brown, mgr.; 16,366 met.; pur. 348.8 million kWh; rev. $9,253,131. (1936) 1

DYERSBURG Elec. System, 211 E. Court, Box 664, 38024, 901/285-2941, J. P. Crawford, mgr.; 9,622 met.; sales 312,695,917 kWh; rev. $11,858,401. (1902) 2

ELIZABETHTON Elec. System, Box 790, 37643, 615/542-2101, Frank L. Curde, mgr.; 17,960 met.; pur. 413,956,539 kWh; rev. $15,102,947. (1945) 2

ERWIN Utils., Box 201, 37650, 615/743-6191, Howard C. Brown, mgr.; 6,562 met.; sales 155,477,538 kWh; rev. $6,203,962. (1945) 2

ETOWAH Utils. Dept., Drawer N. 37331-0614, 615/263-9441, Paul R. Sitzler, mgr.; 3,695 met.; pur. 117,325,144 kWh; rev. $4,326,217. (1939) 2

FAYETTEVILLE Elec. System, Drawer E., 408 W. College St., 37334, 615/433-1522, Walter J. Szelich, mgr.; 12,403 met.; no gen.; pur. 271,695,313 kWh; rev. $11,127,488. (1937) 2

GALLATIN, City of, Dept. of Elec., Box 167, 37[illegible] 615/452-5152, William N. P[illegible]er, mgr.; 7,309 met.; sales 289,125,580 kWh; rev. $11,461,570. (1937) 2

GREENEVILLE Light & Power System, Box 420, 37743, 615/639-8121, Robert C. Lay, mgr.; 23,399 met.; sales 635,665,134 kWh; rev. $25,649,275. (1945) 2

HARRIMAN Util. Bd., 300 Roane St., Box 434, 37748, 615/882-3242, Jack Howard, mgr.; 9,043 met.; pur. 314.9 million kWh; rev. $7,064,000. (1939) 1

HUMBOLDT Utils., 207 S. Thirteenth Ave., 38343, 901/784-9212, Marvin W. Hill, mgr.; 4,304 met.; no gen.; sales 163,250,568 kWh; rev. $6,046,115. (1939) 2

JACKSON Util. Div., 119 E. College, 38301, 901/422-7500, Joe H. Exum, gen. mgr.; 24,939 met.; no gen.; pur. 905,937,559 kWh; rev. $31,895,845. (1937) 2

JELLICO Elec. System, Box 510, 400 S. Main St., 37762, 615/784-8431, John W. Leach Jr., mgr.; 4,077 met.; sales 67,261,000 kWh; rev. $2,588,276. (1935) 2

JOHNSON CITY Power Bd., 100 N. Roan St., Box 1636, 37601, 615/928-2112, Roy L. Taylor, mgr.; 43,497 met.; no gen.; sales 1,133,376,730 kWh; rev. $41,968,172. (TVA) (1945) 2

KNOXVILLE Utils. Bd., Box 1951, 37901, 615/524-2911, E. C. Hoskins, gen. mgr.; 125,414 met.; sales 3,811,863 kWh; rev. $161,232,033. (TVA) (1939) 2

LA FOLLETTE, City of, Elec. Dept., 301 N. Tennessee Ave., Box 1411, 37766, 615/562-3316, Leonard E. Watson, gen. mgr.; 13,966 met.; pur. 256.5 million kWh; rev. $7,040,197. (1939) 1

LAWRENCEBURG Power System, 1607 N. Locust Ave., Box 649, 38464, 615/762-7161, James W. Collins, mgr.; 13,655 met.; pur. 308.3 million kWh; rev. $8,407,319. (1908) 1

LEBANON City Pub. Wks. Dept., 410 Park Dr., 37087, 615/444-0825, Jessie Coe, mgr.; 5,362 met.; pur. 231.5 million kWh; rev. $5,875,296. (1942) 1

LENOIR CITY Utils. Bd., 200 Depot St., Box 449, 37771, 615/986-6591, Kenneth Dutton, mgr.; 23,425 met.; sales 578,255,016 kWh; rev. $23,263,007. (1938) 2

LEWISBURG Elec. System, 599 N. 50A Bypass, Box 90, 37091, 615/359-2544, Richard Turner, gen. mgr.; 4,062 met.; no gen.; pur. 158 million kWh; rev. $5,276,357. (1939) 1

LEXINGTON Elec. System, 92 Main St., Box 30, 38351, 901/968-3662, Travis Lewis, mgr.; 14,873 met.; pur. 277.1 million kWh; rev. $7,479,727. (1939) 1

LOUDON Utils., Box E, 37774, 615/458-2091, Randy McGill, mgr.; 4,333 met.; pur. 100.7 million kWh; rev. $2,696,825. (1939) 1

MARYVILLE Utils. Bd., 400 W. Broadway, Box 667, 37801, 615/984-7900, Tomie Burchfield, actg. mgr. of power; 13,325 met.; pur. 296.1 million kWh; rev. $7,641,819. (1939) 1

McMINNVILLE Elec. System, 200 Morford St., Box 608, 37110, 615/473-3144, Donald R. Collette, gen. mgr.; 5,733 met.; sales 180,099,421 kWh; rev. $7,052,264. (TVA) (1939) 2

MEMPHIS Light, Gas & Water Div., Box 430, 38101, 901/528-4011, David F. Hansen, pres.; 309,707 met.; no gen.; sales 8,566,272,086 kWh; rev. $365,095,107. (1939) 2

MILAN Dept. of Pub. Util., Box 109, 38358, 901/686-1537, Harold L. Crenshaw, supt.; 6,490 met.; no gen.; sales 171,709,273 kWh; rev. $6,629,635. (1897) 2

MORRISTOWN Util. Comm., 441 W. Main St., Box 667, 37814, 615/586-4121, Edwin H. Tucker, gen. mgr.; 9,747 met.; sales 358,792,208 kWh; rev. $14,170,328. (1901) 2

MOUNT PLEASANT Power System, Box 186, 38474, 615/379-3233, Dan Gibson Jr., mgr.; 2,936 met.; sales 71,090,462 kWh; rev. $2,780,080. (1939) 2

MURFREESBORO Elec. Dept. 225 N. Walnut St., Box 9, 37130, 615/893-5514, Larry D. Kirk, gen. mgr.; 14,889 met.; sales 506,519,733 kWh; rev. $18,995,623. (1939) 2

NASHVILLE Elec. Service, 1214 Church St., 37246, 615/747-3895, Paul P. Hembree, gen. mgr.; 208,094 met.; sales 7,418,857,287 kWh; rev. $306,448,451. (1930) 2

NEWBERN Light, Water and Gas, Box J, 38059, 901/627-3221, Donald R. Campbell, mgr.; 1,263 met.; sales 30,806,563 kWh; rev. $1,493,078. (1910) 2

NEWPORT Utils. Bd., Box 519, 37821, 615/623-3074, Lindsay Boyd, gen. mgr.; 13,445 met.; pur. 319,277,718 kWh; rev. $11,656,460. (TVA) (1940) 2

OAK RIDGE, City of, Box 1, 37830, 615/483-5671, Phillip M. Marcum, supt.; 12,449 met.; sales 307,450,955 kWh; rev. $11,807,859. (1960) 2

PARIS Bd. of Pub. Utils., Box 460, 38242, 901/642-1322, Charles R. Perry, supt.; 14,795 met.; pur. 373,650,023 kWh; rev. $13,962,533. (1938) 2

PULASKI Elec. System, Box 368, 38478, 615/363-2522, James A. Hanna, supt.; 10,312 met.; pur. 289,186,879 kWh; rev. $11,151,364. (1891) 2

RIPLEY Power & Light Co., Box 69, 38063, 901/635-2323, Mike Allmand, mgr.; 5,343 met.; sales 177,937,493 kWh; rev. $6,623,082. (1939) 2

ROCKWOOD Elec. Util., Box 108, 37854, 615/354-0514, Charles W. Johnson, gen. mgr.; 9,497 met.; sales 206,928,000 kWh; rev. $8,517,284. (1939) 2

SEVIER COUNTY Elec. System, 114 Church St., Box 310, Sevierville, 37862, 615/453-2887, Jack J. Delozier, supt.; 18,320 met.; sales 466,779,581 kWh; rev. $19,236,095. (1940) 2

SHELBYVILLE Power System, 308 S. Main St., Box 530, 37160, 615/684-7171, Eugene Crowell, mgr.; 6,405 met.; sales 220,132,544 kWh; rev. $8,487,507. (1939) 2

SMITHVILLE Elec. System, Box 228, 37166, 615/597-4735, Mark Ashburn, mgr.; 2,021 met.; pur. 50.2 million kWh; rev. $1,387,259. (1969) 1

SOMERVILLE Light, Gas & Water, 106 E. Court Square, 38068, 901/465-3676, Kennie German, mgr.; 1,144 met.; pur. 28.4 million kWh; rev. $799,732. (1936) 1

SPARTA Elec., Box 468, 38583, 615/738-2281, Paul R. Page, mgr.; 2,412 met.; sales 69,423,979 kWh; rev. $3,070,362. (1961) 2

SPRINGFIELD Dept. of Elec., 123 Fifth Ave., W., Box C, 37172, 615/384-3561, W. Royce Williams, supt.; 4,486 met.; sales 133,141,661 kWh; rev. $5,250,028. (1905) 2

SWEETWATER Bd. of Pub. Utils., Box 191, 37874, 615/337-5081, Lewis Wayne Roach, gen. mgr.; 5,320 met.; sales 117,063,494 kWh; rev. $5,270,461. (1939) 2

TRENTON, City of, Elec. Dept., 309 College St., 38382, 901/855-1561, Paul Bennett, mgr.; 2,342 met.; sales 73,824,787 kWh; rev. $2,860,199. (1910) 2

TULLAHOMA Utils. Bd. of Pub. Utils., 901 S. Jackson, 37388, 615/455-1783, Bob G. Burton, gen. mgr.; 7,336 met.; pur. 205.5 million kWh; rev. $6,480,402. (1930) 1

UNION CITY Elec. System, 215 E. Grove St., Box 5, 38261, 901/885-9212, Stanley R. McMinn, mgr.; 5,166 met.; pur. 288,015,000 kWh; rev. $10,077,780. (1952) 2

WEAKLEY COUNTY Mun. Elec. System, 501 Lindel St., Martin, 38237, 901/587-9521, Gerald Brooks, supt.; 16,273 met.; sales 368,195,558 kWh; rev. $14,227,077. (1938) 2

WINCHESTER Power System, 219 Second Ave., N.W., 37398, 615/697-2238, Lynn Bean, mgr.; 3,434 met.; sales 81,821,561 kWh; rev. $3,590,680. (1939) 2

TEXAS

AUSTIN, City of, Elec. Dept., Box 1088, 78767, 512/397-1600, H. L. Peterson, acting dir.; 173,192 met.; gen. 550,000 kW coal, 1,400,000 oil, 5,853,947,000 kWh; sales 5,604,345,956 kWh; rev. $286,068,513. (1895) 2

BARTLETT, City of, 140 W. Clark 76511, 817/527-3557, Mike Williams util. supt.; 650 met.; no gen.; pur. 6,384,000 kWh. (1920) 2

BASTROP Elec. Dept., 904 Main St., Box S, 78602, 512/321-3941, Sidney Lawhon, supt.

BELLVILLE, City of, Drawer 817, 77418, 713/865-3136, John Mumme, city adm.; 1,639 met.; no gen.; sales 30,162,828 kWh; rev. $1,650,924. (1938) 2

BOERNE, City of, Utils., Drawer U, 78006, 512/249-3970, Edgar Schwarz Jr., city admr.; 1,950 met.; no gen.; pur. 29,000,000 kWh. (1941) 2

BOWIE Utils., 76230, 817/872-1114, Ronnie Parkinson, elec. supt.; 2,167 met.; no gen.; pur. 13.6 million kWh.

BRADY, City of, Power Plant, 212 W. Commerce, 76825, 915/597-2152, Dennis Jones, city supt.; 3,583 met.; gen. 2,500 kW oil-fired, 13,850 kW dual-fuel, 5,688,000 kWh; sales 48,540,000 kWh; rev. $11,432,780. (1912) 2

BRAZOS RIVER AUTHORITY, Box 7555, Waco, 76710, Carson Hoge, gen. mgr.; gen. 22,500 kW hydro, 62 million kWh; rev. $311,950. (1929) 2

BRENHAM, City of, Mun. Light & Power System, 210 N. Park St., Box 361, 77833, 713/836-7911, Leslie D. Clayton, mayor; 5,698 met.; no gen.; sales 142,418,765 kWh; rev. $6,060,989. (1941) 2

BRIDGEPORT Light & Power System, 812 Halsell, 76030, Doug Whitehead, asst. city adm.; 1,800 met.; no gen.; pur. 260 million kWh; rev. $1.7 million. (1926) 2

BROWNFIELD Mun. Power & Light Plant, 218 W. Main St., 79316, 806/637-4547, Alva J. Geron, city mgr.; 4,493 met.; gen. 22,920 kW, 16,420 kW dual-fuel eng., 6,500 kW gas turbine, 62,516,000 kWh; sales 53,280,381 kWh. (1923) 2

BROWNSVILLE Pub. Util. Bd., Box 3270, 78520, 512/542-6285, Bill Towers, gen. mgr.; 25,324 met.; gen 98,000 kW, 45,000 kW steam, 53,000 kW gas turbine, 114,229,650 kWh; sales 568,641,000 kWh; rev. $32,984,462. (1904) 2

BRYAN, City of, Utils., Box 1000, 77801, 713/779-5622, Gailord White, dir., elec. utils.; 19,249 met.; gen. 230,000 kW, 209,000 kW gas, 21,000 kW gas turbine, 605,671,539 kWh; sales 589,172,988 kWh; rev. $31,617,151. (1919) 2

BURNET Utils., 127 E. Jackson St., 78611, 512/756-4501, Kenneth Taylor, city mgr.; 1,280 met.; no gen.; pur. 10.3 million kWh; rev. $172,291.

CALDWELL Mun. Light Dept., 214 W. Buck St., 77836, 713/567-3271, Willis Gilliam, supt.; 1,648 met.; no gen.; pur. 31.0 million kWh; rev. $1,318,916. 2

CASTROVILLE, City of, Box 479, 78009, 512/538-2192, James W. McAnelly, util. mgr.; 738 met.; no gen.; pur. 9,861,740 kWh; rev. $574,664. (1948) 2

COLEMAN Mun. Light & Power, Box 592, 76834, 915/625-2939, Elmer Rodgers, supt.; 2,800 met.; gen. 12,500 kW, 2,250 kW gas-fired eng., 10,250 kW dual-fuel eng., 16,682,000 kWh; pur. 24,700,000 kWh; rev. $1,821,323. (1904) 2

COLLEGE STATION, City of, 1101 Texas Ave., Box 9960, 77840, 713/696-8868, Linda S. Pioonka; 10,667 met.; no gen.; pur. 220,854,800 kWh; rev. $9,295,153. (1938) 2

CROSBYTON Power & Light System, 119-23 S. Ayrshire St., 79322, 806/675-2301, Norton Barrett, city mgr.-sec.; 913 met.; gen. 4,000 kW dual-fuel, 11,100,000 kWh; pur. none; rev. $823,865. (1937) 2

CUERO, City of, Box 512, 77954, 512/275-6114, James H. Pratt, city mgr.; 3,424 met.; no gen.; pur. 64,286,500 kWh; rev. $3,041,557. 2

DENTON Mun. Utils., 215 E. McKinney, 76201, 817/566-8230, Robert E. Nelson, PE, Dir.; 18,548 met.; gen. 348,600 kW gas; pur. 185,596,000 kWh; rev. $25,884,768. (1905) 2

ELECTRA City Power Plant, 220 E. Railroad, 76360, 817/495-2146, Gary W. Jones, city mgr.; 2,163 met.; gen. 3,200 kW; 121,500 kWh, sales 15,291,270 kWh; rev. $1,081,495. 2

FARMERSVILLE Mun. Light & Power, 303 S. Main, 75031, 214/782-6151; Raymond R. Brandon, mayor; no gen.

FLATONIA Elec. Dept., Box 375, 78941, 512/865-3548; Daniel F. Janak, supt.; 955 met.; no gen.; pur. 13,997,792 kWh; rev. $769,024. (1945) 2

FLORESVILLE, City of, Elec. Light & Power System, 1400 4th St., Box 218, 78114, 512/393-3131, Fred R. Wauters, mgr.; 6,593 met.; no gen.; sales 78,164,635 kWh; rev. $4,931,898. (1943) 2

FLOYDADA Power & Light Dept., Box 10, 79235, 806/983-2834, William A. Feuerbacher, city mgr.; 1,223 met.; gen. 7,540 kW, 3,250 kW gas-fired eng., 4,290 kW dual-fuel eng., 1,835,900 kWh; pur. 13,569,600 kWh; rev. $974,603. (1939) 2

FREDERICKSBURG, City of, Box 111, 78624, 512/997-7521, Walter O. Fuhrmann, util. mgr.; 3,734 met.; no gen.; sales 57,371,261 kWh; rev. $2,858,235. (1935) 2

GARLAND Power & Light System, Box 401889, 75040, 214/494-7254, Robert E. Corder, elec. util. dir.; 40,699 met.; gen. 430,000 kW gas, 1,575,636,000 kWh; sales 1,538,465 kWh; rev. $69,870,757. (1922) 2

GARRISON, City of, Box 207, 75946, 713/347-2201; Elmer Boatman, city supt.; 532 met.; no gen.; pur. 6,956,800 kWh; rev. $333,053. 2

GEORGETOWN, City of, Box 409, 78626, 512/863-5533, Leo Wood, city mgr.; 4,800 met.; no gen.; pur. 91,000,000 kWh; rev. $4,454,000. 2

GIDDINGS, City of, Lighting & Power System, 118 E. Richmond St., 78942, 713/542-2311, Larry Pippen, city mgr.; 2,112 met.; no gen.; sales 34,082,032 kWh; rev. $2,188,081. (1941) 2

GOLDTHWAITE Utils., 1218 Fisher St., Box 450, 76844, 915/648-3186, Dale Allen, city mgr.; 745 met.; no gen.; rev. $133,178. (1941)

GONZALES, City of, Box 547, 78629, 512/672-2815, Calvin E. Spacek, city mgr.; 3,048 met.; no gen.; pur. 61,749,100 kWh; rev. $847,473. (1941) 2

GRANBURY Mun. Elec. Dept., 111 S. Houston, Box 490, 76048, 817/573-1114, Albert Lawrence, supt.; 1,493 met.; gen. 392 kW eng.; pur. 25.8 million kWh; rev. $1,750,000. (1912) 1

GREENVILLE, City of, Elec. Light & Power, Box 1049, 75401, 214/455-2880, John W. Tarpley, utils. dir.; 9,337 met.; gen. 80,500 kW gas, 3,800 kW oil-fired, 1,700 kW gas-fired, 10,000 kW dual-fuel, 195,605,000 kWh; pur. 68,537,000 kWh; rev. $7,290,334. (1891) 2

GUADALUPE-BLANCO RIVER AUTHORITY, Box 271, Seguin, 78155, 512/379-5822, Gregory E. Rothe, oper. mgr.; 1 met.; gen. 16,040 kW hydro, 100 million kWh; pur. none; rev. $2,342,000. (1930) 2

HALLETSVILLE Mun. Utils., Box 257, 77964, 512/798-3681, Thomas H. Kostelnik, dir. pub. wrks., 1,400 met.; no gen.; pur. 29,756,200 kWh. (1891) 2

HEARNE Mun. Elec. System, 210 Cedar St., Box 151, 77859, 713/279-3461, Thomas Taylor, city mgr.; 2,400 met.; gen. 6,500 kW dual-fuel eng., 4,500 kW gas, 2,000 kW oil, 6,500 kW gas turbine; pur. 35,000,000 kWh; rev. $2,100,000. (1912) 2

HEMPSTEAD, City of, Elec. Dept., 1125 Austin St., 77445, 713/826-2486, James Vines, mgr. of utils.; 1,665 met.; no gen.; pur. 26.8 million kWh; rev. $1,338,562. 2

HONDO, City of, Elec. System, 1600 Ave. M, 78861, 512/426-3377, Oscar Dominguez, supt.; 2,403 met.; no gen.; sales 33,313,431 kWh; rev. $1,948,468. (1942) 2

JASPER Light & Power, 272 E. Lamar St., 75951, 713/384-4651, Wayne DuBose, city mgr.; 3,820 met.; gen. 35,000 kW coal, 4,000 kW hydro, 105,800,000 kWh; sales 105,800,000 kWh; rev. $4,303,632. (1941) 2

KIRBYVILLE Light & Power Co., 312 E. Drew, 75956, 713/423-2464, C. B. Herndon, mgr.; 1,074 met.; no gen.; pur. 15,330,546 kWh; rev. $725,206. (1974) 2

LA GRANGE Elec. Utils., Box 339, 78945, 713/968-5805, J. D. Legler, city mgr.; 1,825 met.; no gen.; pur. 19.1 million kWh; rev. $284,359.

LAMPASAS, City of, 302 E. Third St., Box 666, 76550, 512/556-3641, Nolan R. Word, supt.; 2,620 met.; no gen.; pur. 36.6 million kWh; rev. $415,446. (1946)

LEXINGTON Plants, Box 56, 78947, 713/773-2221, Jerry E. Poston, foreman; 584 met.; no gen.; pur. 6,945,756 kWh; rev. $341,404. (1939) 2

LIBERTY Mun. Elec. System, 1829 Sam Houston St., 77575, 713/336-3684, Roy N. Bennett, city mgr.; 3,758 met.; no gen.; pur. 140,192,890 kWh; rev. $5,728,280. (1939) 2

LIVINGSTON Mun. Elec. System, 200 W. Church, 77351, 713/327-4311, Tom Nevinger, city mgr.; 2,396 met.; no gen.; pur. 52,488,800 kWh; rev. $2,671,905. 2

LLANO, City of, Utils., 301 W. Main St., 78643, 915/247-4158, George C. Rogers, city mgr.; 1,633 met.; no gen.; pur. 25.1 million kWh; rev. $1,156,669. (1946) 1

LOCKHART, City of, Utils., 308 W. San Antonio St., Box 239, 78644, 512/398-3461, Cecil E. Massey, city mgr.; 3,092 met.; no gen.; pur. 44,145,900 kWh; rev. $2,524,373. (1928) 2

LOWER COLORADO RIVER AUTHORITY, Box 220, Austin, 78767, 512/473-3200, Elof Soderberg, gen. mgr.; 22,450 met. gen. 1,830,000 kW, 1,600,000 kW steam, 230,000 kW hydro, 4,961,936,273 kWh; sales 5,023,987,733 kWh; rev. $163,258,314. (1935) 2

LUBBOCK Power & Light Dept., Box 2000, 79457, 806/793-9381, Carroll McDonald, elec. utils. dir., 33,716 met.; gen.; 212,000 kW, 172,000 kW gas steam, 10,000 kW gas-fired eng., 30,000 kW gas turbine, 631,455,000 kWh; pur. none; rev. $34,002,728 (1916) 2

LULING Utils., 509 E. Crockett, Box 630, 78648, 512/875-2115, Reuben Kimball, city mgr.; 2,362 met.; no gen.; pur. 39 million kWh; rev. $2,212,519. (1941) 1

MASON, City of, Utils., 124 Moody St., Box 68, 76856, 915/347-6449, Carlton Crouch, city mgr.; 1,629 met.; no gen.; pur. 14,995,949 kWh; rev. $181,964. (1955) 2

MOULTON, City of, Box 369, 77975, 512/596-4621, Richard Kresta Jr., mgr.; 607 met.; no gen.; pur. 9.3 million kWh; rev. $444,874. (1939) 2

NEW BRAUNFELS Utils., Box 289, 78130, 512/625-9125, Robert H. Sohn, gen. mgr.; 12,324 met.; sales 414,622,000 kWh; rev. $18,611,960. (1942) 2

NEWTON, City of, Box 889, 75966, 713/379-5061, Melvin Forward, supt.; 729 met.; no gen.; rev. $134,621.

PLAINS, City of, 601 E. 11th, Box 550, 79355, 806/456-2288, Jimmy Rice, city mgr.; 365 met.; gen. 1,500 kW eng.

ROBSTOWN, City of, Util. System, Box 71, 78380, 512/387-3554, John J. Foster, supt. of utils.; 4,430 met.; gen. 2,050 kW oil-fired eng.; 1,344 kW gas-fired eng.; 20,865 kW dual-fuel eng.; 68,297,200 kWh; pur. 6,948,000 kWh; rev. $4,989,609. (1939) 2

SAN ANTONIO City Pub. Service Bd., Box 1771, 78296, 512/227-3211, J. K. Spruce, gen. mgr.; 353,181 met.; gen. 836,000 kW coal, 2,400,000 kW gas; 8,412,917,000 kWh; sales, 7,324,630,000 kWh; rev. $357,778,000. (1942) 2

SAN AUGUSTINE, City of, 301 S. Harrison St., 75972, 713/275-2121, Alton Shaw, city mgr.; 1,150 met.; no gen.; pur. 15,000,000 kWh; rev. $454,869. (1917) 2

SANGER, City of, 200 Bolivar, Box 578, 76266, 817/458-3322, Lindon Carr, mgr.

SCHULENBURG Utils. Dept., Box 8, 78956, 713/743-4126, S. M. Barrington, mgr.; 1,517 met.; no gen.; pur. 26,439,000 kWh; rev. $1,323,744. (1941) 2

SEGUIN Elec. Util., 205 N. River St., Box 591, 78155, 512/379-3212, Bill E. Polasek Jr., mgr.; 6,582 met.; gen. 500 kW; 250 kW oil-fired eng.; 250 hydro; 1,555,700 kWh; pur. 125,084,000 kWh; rev. $8,412,020. (1907) 2

SEYMOUR Power & Light, Box 31, 76380, 817/888-3148, John R. Milford, city adm.; 1,155 met.; gen. 1,075 kW eng.; pur. 18.6 million kWh; rev. $759,920. (1929) 6

SHINER Light & Water Utils., Box 308, 77984, 512/594-3362, Johnny Kurtz, elec. supt.; 1,000 met.; no gen. 2

SMITHVILLE Light & Water Dept., Box 449, 78957, 512/237-3267, Donald H. Meyers, util. mgr.; 1,800 met.; no gen.; pur. 20,000,000 kWh; rev. $1,300,000. (1939)

SONORA, City of, 201 N. Main. 76950, 915/387-2662, Roy L. Taylor, mgr.; 1,658, met.; no gen., pur. 20,500,522 kWh; rev. $1,055,457. (1942) 2

TIMPSON Light & Water Dept., Box 369, 75975, W. H. Eddins, supt.

TULIA, City of, Power & Light, 201 N. Maxwell St., 79088, 806/995-3547, N. D. Waggoner, elec. util. dir.; 2,301 met.; 17,636 kW dual-fuel eng., 33,230,000 kWh; pur. none; rev. $2,015,341. (1912) 2

TRINITY RIVER AUTHORITY, Box 60, Arlington, 76010, 817/467-4343, Danny Vance, mgr. **(The authority is considering development of a 60-MW hydro project at Lake Livingston.)** (1955) 2

VERNON, City of, 1830 Main, 76384, 817/552-2581, Sam Phelps, city mgr.; 2,632 met.; gen. 10,000 kW dual-fuel eng.; 3,296,600 kWh; pur. 39,385,600 kWh; rev. $1,966,966. 2

WAELDER, City of, Box 427, 78959, 512/665-3131, Joe Parr, mayor; 403 met.; no gen.; pur. 540,600 kWh; rev. $269,418. 2

WEATHERFORD Mun. Elec. System, 119 Palo Pinto St., Box 255, 76086, 817/594-5441, Tom Merka, utils. dir.; 6,600 met.; gen. 4,000 kW dual-fired eng., 2,000 kW diesel; pur. 121,500,000 kWh; rev. $6,916,597. 2

WEIMAR, City of, 106 E. Main St., Box 67, 78962, 713/725-8554, F. E. Parks, city mgr.; 1,073 met.; no gen.; sales 25,949,132 kWh; rev. $1,374,247. (1939) 2

WHITESBORO Power & Light Plant, 112 W. Main, 76273, 214/564-3122, Lindon Carr, supt., dist. and trans.; 1,400 met.; gen. 2,768 kW eng., 226,000 kWh; pur. 8.2 million kWh.

YOAKUM, City of, Mun. Utils., Box 738, 77995, 512/593-2641, J. W. Dodson, city mgr.; 2,985 met.; no gen. pur. 47,371,300 kWh; rev. $2,427,281. 2

UTAH

BEAVER CITY Mun. Elec. Light & Water, Box 271, 84713, 801/438-2451, Lamont D. Bettridge, head electrician, 973 met.; gen. 650 kW hydro, 3,165,600 kWh; pur. 17,000,800 kWh.; rev. $673,542. 2

BLANDING Elec. Dept., Box 68, 84511, 801/678-2791, Francis D. Nielson, mgr.

BOUNTIFUL City Light & Power, 198 S. 200 West, 84010, 801/295-9496, W. Berry Hutchings, mgr.; 10,289 met.; gen. 8,200 kW, sales 130,262,294 kWh; rev. $4,473,074. (1935) 2

BRIGHAM City Light & Power, 20 N. Main, 84302, 801/734-2001, Jim Davis, supt.; 5,623 met.; gen. 1,750 kW hydro, 8,657,400 kWh, sales 63,791,000 kWh, rev. $3,015,257. (1918) 2

ENTERPRISE Power Board, 84725, 801/878-2412, Richard P. Truman, supt.; 270 met.; no gen.; pur. 5.8 million kWh. (1972)

EPHRAIM City Light and Power Dept., Box 687, 5 S. Main, 84627, 801/283-4631, Dick Bailey, mgr.; 700 met.; gen. 200 kW hydro, 1.1 million kWh; pur. 16.1 million kWh; rev. $177,500. 0

FAIRVIEW Mun. Light & Power Plant, 84629, 801/427-3858, Ray D. Eicher, mayor; 380 met.; no gen.; pur. 5.7 million kWh. 0

FILLMORE CITY, 96 S. Main St., 84631, 801/745-5314, Ralph Robinson, mgr.; 871 met.; no gen.; pur. 24.2 million kWh, rev. $606,589. (1918) 0

HEBER Light & Power Co., 31 S. 100 West, Box 330, Heber City, 84032, 801/654-1581, Ray Farrell, gen. mgr.; 3,500 met.; gen. 2,300 kW hydro, 37.7 million kWh; pur. 37.7 million kWh; rev. $1,600,000 (1909) 1

HELPER CITY Mun. Corp., 73 S. Main, Box 221, 84526, 801/472-5391, Lucy Richeda, city recorder; 1,545 met.; sales 12,703,000 kWh, rev. $704,822. 2

HOLDEN Elec. Light System, 84636, 801/795-2253, Evan B. Stevens, electrician; 165 met.; no gen.; pur. 1.5 million kWh; rev. $61,000. (1922) 1

HURRICANE City Power, Box 918, 84737, 801/635-4950, Rick Marchal, mgr.; 875 met.; no gen.; pur. 14,000,000 kWh; rev. $600,000. (1974) 2

HYRUM City Corp., 83 W. Main, 84319, 801/245-6033, Reece D. Nielsen, comm.; 782 met.; gen. 450 kW hydro, 1.2 million kWh; pur. 22.5 million kWh. 0

KANOSH Town Corp., Box 96, 84637, Frank Harding; 214 met.; no gen.; pur. 1,955,156 kWh. 2

KAYSVILLE City Power & Light, 44 No. Main, 84037, 801/544-8112, Walt Meacham, supt. elec. dept.; 2,870 met.; no gen.; pur. 32,625,487 kWh; rev. $1,736,006. (1908) 2

LEHI CITY, 95 E. 100 North, 84043, 801/768-3545, Glen A. Carter, mgr.; 2,600 met.; no gen.; pur. 19.3 million kWh. (1926) 2

LEVAN Mun. Elec. System, 31550 2nd East, 84639, 801/623-1600, Golden Mangelson, Mayor, 225 met.; no gen.; pur. 31,000 kWh; rev. $45,000. (1918) 2

LOGAN, City of, Power & Light Dept., 61 W. 100 North St., Box 527, 84321, 801/752-3060, Vaun Bethers, supt., 15,659 met.; gen. 7,060 kW oil, 1,400 kW hydro, 6,328,120 kWh; sales 137,168,462 kWh; rev. $7,413,313. (1903) 2

MANTI Light & Power, 191 N. Main 84642, 801/835-2321, Tony Peterson, mgr.

MEADOW Town Elec., 84644, 801/842-7281, Junior L. Bond, town pres.; 85 met.; no gen.; pur. 1.8 million kWh.

MONROE City Elec. Light Dept., Box A, 55 N. Main 84754, 801/527-3511, Duane E. Nay, mayor; gen. 225 kW hydro, 1.4 million kWh; pur. 9.3 million kWh. 0

MORGAN City Corp., Box 267, 84050, 801/829-3551, Dennis D. Woolsey, mgr.; 767 met.; rev. $223,600. (1933) 1

MT. PLEASANT Mun. Elec. Light & Power, 115 W. Main St., 84647, 801/462-2456, John Thacker, city mgr.; 750 met.; gen. 300 kW hydro, pur. 12.5 million kWh. 0

MURRAY City Power Dept., 4800 South 153 West, 84107, 801/268-8933, Jon C. Young, gen. mgr.; 12,739 met.; gen. 20.4 kW coal, .75 kW hydro, 43,104,570 kWh; sales 189,584,852 kWh; rev. $7,844,107. (1912) 2

NEPHI City Power, 21 E. 100 North, 84648, 801/623-0276, G. Richard Judd, supt.; 1,500 met.; no gen.; pur 27 million kWh; rev. $1,200,000. (1906) 2

OAK CITY Mun. Elec. Dept., Box 114, 84649, 801/846-2861, Wilburn Olsen, mgr.; no gen.; pur. 2 million kWh. 0

PARAGONAH Mun. Light Dept., 84760, 801/477-3605, Scott Barton, mayor; 125 met.; no gen.; pur. 1 million kWh. 0

PAROWAN City Corp., 5 S. Main, 84761, 801/477-3331, M. DeLance Terry, head electrician; 748 met.; gen. 1,350 kW hydro, 4.7 million kWh; pur. 9.7 million kWh; rev. $371,116. (1929) 1

PAYSON City Corp., 439 W. Utah Ave., Box 188, 84651, 801/465-9226, Gary Tassainer, mgr.; 1,400 met.; no gen.

PRICE Mun. Corp., Box P, 84501, 801/637-2905, Art Lee Martines, Mayor, 3,462 met.; pur. 47,574,679 kWh; rev. $2,403,031. 2

PROVO City Power, 251 W. 800 N., Box 658, 84601, 801/373-7170, Bud L. Bonnett, dir., 21,716 met.; gen. 49,500 kW, 10,000 kW dual fuel, 32,500 kW coal, 7,000 kW gas, 52,064,150 kWh; pur. 334,000,000 kWh; rev. $9,693,326. (1940) 2

ST GEORGE, City of, Util. Comm., 175 E. 200 North, 84770, 801/673-3593, Rudger M. McArthur, dir. of utils., 4,411 met.; gen. 7,508 kW; 6,868 kW eng., 640 kW hydro; pur. 141,250,618 kWh; rev. $3,195,846. (1942) 2

SALEM City Power Dept., Box 338, 84653, 801/423-2770, Douglas R. Johnson, mgr.; 755 met.; no gen.; pur. 4,500,000 kWh; rev. $351,000. (1922) 2

SPANISH FORK, City of, 50 S. Main St., 84660, 801/798-6762, Robert Disbrow, supt., 3,000 met.; no gen.; pur. 43,397,308 kWh; rev. $1,173,000. (1919) 2

SPRING CITY Corp., Box 187, 84662, 801/462-2244, Genn S. Osborne, mayor, 306 met.; sales 2,738,087; rev. $143,559 2

SPRINGVILLE Mun. Corp., 50 S. Main, 84663, 801/489-4468, Charles M. Monney, mgr.; 3,000 met.; gen. 920 kW hydro, 4.9 million kWh; pur. 21.2 million kWh; rev. $583,300. (1906)

VERMONT

BARTON Village, Inc., 05822, 802/525-6539, Orra White, supt.; 675 met.

BURLINGTON Elec. Light Dept., 585 Pine St., 05401, 802/658-0300, Robert C. Young, gen. mgr.; 15,198 met.; gen. 54,500 kW, 26,500 kW steam, 28,000 kW gas turbine, 61,122,400 kWh; pur. 322,284,430 kWh: rev. $18,782,782. (1905) 2

ENOSBURG FALLS, Water & Light Dept., 05450, 802/933-5544, Bernard C. Machia, supt., 1,036 met.; gen. 1,650 kW; 900 kW oil (eng.), 750 kW hydro; sales 13,749,501 kWh; rev. $712,892. (1920) 2

HARDWICK Elec. Light Dept., N. Main St., Box 516, 05843, 802/472-5201, William Fee, supt.; 3,301 met.; gen. 800 kW hydro, 600 kW Diesel eng., 2,786,080 kWh; pur. 25,850,790 kWh: rev. $1,307,659. 2

HYDE PARK, Village of, Inc., Box 37, 05655, 802/888-2310, Gary Anderson, chrmn., bd. of trustees; 784 met.; no gen.; pur. 8,302,200 kWh: rev. $312,429. (1895) 2

JACKSONVILLE, Village of, 05342, 802/368-7010, Howard M. Bemis, pres.; 474 met.; no gen.; pur. 4,180,990 kWh. rev. $197,247. (1921) 2

JOHNSON, Village of, Elec. Dept., Box 603, 05656, 802/635-2301, Kenneth Phelps, supt.; 650 met.; no gen.; pur. 16,758,300 kWh: rev. $648,076. (1894) 2

LUDLOW, Village of, Elec. Light Dept., Municipal Bldg., Box 289, 05149, 802/228-7766, Dean R. Brown Jr., mgr.; 1,928 met.; no gen.; pur. 33.1 million kWh: rev. $1,376,240. (1900) 1

LYNDONVILLE Mun. Elec. Plant, 24 Main St., 05851, 802/626-3366, Kenneth C. Mason, Mgr.; 3,400 met.; gen. 2,350 kW hydro, 4.2 million kWh; pur. 39.6 million kWh: rev. $1,693,095. (1896) 1

MORRISVILLE Water & Light Dept., 18 Portland St., Box 325, 05661, 802/888-3348, Robert B. Page, supt.; 2,452 met.; gen. 2,900 kW hydro; 12,534,340 kWh; sales 40,982,883 kWh: rev. $1,897,833. (1894) 2

NORTHFIELD, Village of, Elec. Dept., 26 S. Main St., 05663, 802/485-5411, Sailey Ennis, Supt.; 1,618 met.; no gen.; pur. 30,431,924 kWh; rev. $944,700. (1895) 2

ORLEANS Village Inc., Memorial Square, 05860, 802/754-8584, Slayton R. Marsh, supt.; 600 met.; no gen.; pur. 14,777,720 kWh; rev $652,915. (1925) 2

READSBORO, Village of, Elec. Light Dept., 114 Main St., Box 236, 05350, 802/423-7593, Robert Berard, supt.; 280 met.; no gen.; pur. 1,879,200 kWh: rev. $98,691. (1936) 2

SPRINGFIELD, Town of, 05156, 802/885-2582, John Parker. **(Organized 1975, no retail distribution yet.)**

STOWE Village, Inc., 05672, 802/253-7215, Richard Wilkins, supt.; 2,750 met.; no gen.; pur. 30.4 million kWh: rev. $597,942.

SWANTON Village Elec. Dept., 120 First St., Box 279, 05488, 802/868-3397, Orman E. Croft, village mgr.; 2,459 met.; gen. 4,600 kW hydro, 23,875,620 kWh; pur. 26,826,500 kWh: rev. $1,860,641. (1894) 2

VIRGINIA

BEDFORD, City of, Drawer 807, 24523, 703/586-8963, Robert J. Schnabl, elec. util. dir.; 4,912 met.; gen. 950 kW hydro, 5.7 million kWh; pur. 139.7 million kWh; rev. $5,442,065. (1911) 1

BLACKSTONE, Town of, 100 W. Elm St., 23824, 804/292-7521, Richard H. Lee, town mgr.; 1,703 met.; pur 28,476,000 kWh; rev. $1,983,310. (1927) 2

BRISTOL Utils. Bd., 300 Lee St., 24201, 703/669-4112, Thomas E. Adams, gen. mgr.; 13,025 met.; no gen.; pur. 414,780,630 kWh; rev. $16,876,056. (TVA power distributor) (1945) 2

CULPEPER, Town of, Elec. Dept., 118 W. Davis St., 22701-3092, 703/825-8165, J. A. Brookes, elec. supt.; 1,411 met.; gen. 6,616 kW, 1,600 kW gas turbine, 5016 kW dual-fuel eng., 4,552,000 kWh; pur. 16,247,400 kWh; rev. $1,390,000. (1934) 2

DANVILLE, City of, Elec. Dept., Box 3308, 24543, 804/799-5270, Harold Cole, acting dir.; 36,950 met.; gen. 9,500 kW hydro, 13,027,000 kWh; pur. sales 528,693,767 kWh; rev. $26,097,518. (1886) 2

ELKTON Town Utils., 173 W. Spotswood Ave., 22827, 703/298-1951, Gerald K. Monger, supt.; 728 met.; no gen.; pur. 12.2 million kWh; rev. $617,855. (1930s) 2

FRANKLIN Elec. Dept., Box 179, 23851, 804/562-4111, Spurgeon R. Spivey, dir. of pub. util.; 3,893 met.; no gen.; pur. 79.1 million kWh; rev. $3,230,000. (1891)

FRONT ROYAL Elec. Dept., Box 1560, 22630, 703/635-3111, Walter M. Duncan, town mgr.; 4,815 met.; no gen.; pur. 80,298,000 kWh; rev. $3,300,664. (1904) 2

HARRISONBURG Elec. Comm., 87 W. Bruce St., 22801, 703/434-5361, Kenneth L. Frantz, gen. mgr.; 8,157 met.; no gen.; sales 229,087,493 kWh; rev. $9,972,873. (1957) 2

IRON GATE Elec. Dept., 24448, E. E. Larman, mayor; 227 met.; pur. 2.1 million kWh; rev. $81,680. 1

MANASSAS, City of, Box 512, 22110, 703/361-4104, C. M. Moyer Jr., city mgr.; 5,364 met.; gen. 4,000 kW eng.; pur 98,000,000 kWh; rev. $5,147,783. (1912) 2

MARTINSVILLE, City of, Elec. Dept., Box 1112, 24114, 703/638-3972, Robert I. Corekin, dir.; 7,153 met.; gen. 1,300 kW hydro, 104,000 kWh; pur. 170.6 million kWh; rev. $7,254,789. (1900) 1

RADFORD, City of, Elec. Dept., 701-17th St., 24141, 703/639-4521, C. W. Willis, supt., elec. dept.; 5,321 met.; gen. 1,250 kW hydro, 3.4 million kWh; pur. 160,000,000 kWh; rev. 6,473,268. (1930) 2

RICHLANDS, Town of, 217 Railroad Ave., 24641, 703/964-2566, C. P. Mahaffey, town mgr.; 2,454 met.; no gen.; pur. 43+ million kWh; rev. $1,804,890. 2

RICHMOND Dept. of Pub. Utils., 600 E. Broad St., 23219, 804/780-4884, Danield A. Lynch, dir. pub. utils., gen. 2,100 kW hydro; 7,300,500 kWh; pur. 49,663,624 kWh; rev. $2,919,422. (1910) 2

SALEM, City of, Elec. Dept., 736 W. Main St., 24153, 703/375-3030, Reginald A. Oliver, supt.; 10,469 met.; no gen.; sales 217,034,396 kWh; rev. $10,221,380. (1891) 2

WAKEFIELD, Town of, Box 545, 23888, 804/899-2361, Stephen F. Owen, town mgr.; 540 met.; no gen.; pur. 7,368,000 kWh; rev. $460,000. 2

WASHINGTON

(Public Utility Districts, abbreviated PUD, are listed alphabetically by county names.)

BENTON COUNTY PUD No. 1, Box 6270, Kennewick, 99336, 509/582-2175, Robert W. Blodgett, mgr.; 31,366 met.; no gen.; sales 1,297,140,480 kWh; rev. $20,844,287. (1934) 2

BLAINE City Light, Box 490, 98230, 206/332-8311, H. B. Bonallo, mayor; 1,876 met.; no gen.; pur. 41.6 million kWh; rev. $684,970. (1907) 1

CASHMERE Light Dept., 101 Woodring St., 98815, 509/782-3513, David L. Simmer, supt.; 1,225 met.; no gen; pur. 41,832,000 kWh; rev. $636,065. (1908) 2

CENTRALIA, City of, Light Dept., 1100 N. Tower Ave., 98531, 206/736-7611, William C. Cummings, supt.; 6,921 met.; gen. 10,500 kW hydro; pur. 101,382,954 kWh; rev. $3,371,680. (1895) 2

CHELAN COUNTY PUD No. 1, 327 Wenatchee Ave., Box 1231, Wenatchee, 98801, 509/663-8121, Gerald L. Copp, mgr.; 24,232 met.; gen. 1,884,175 kW, 1,883,850 kW hydro, 325 kW oil-fired, 9,835,744,800 kWh; sales 5,044,484,000 kWh; rev. $64,724,729. (1948) 2

CHENEY City Light, 609 Second St., 99004, 509/235-8431, Tom Richardson, dir.; 3,007 met.; no gen.; sales 89,784,000 kWh; rev. $1,476,188. (1931) 2

CHEWELAH Light Dept., 102 Webster Ave., 99109, 509/935-8311, Fred Nussbaum, util. supvr.; 939 met.; no gen.; pur. 8.3 million kWh; rev. $105,240. (1907)

CLALLAM COUNTY PUD No. 1, Box 1117, Port Angeles, 98362, 206/452-9771, ext. 232, Phillip K. Jackson, mgr.; 17,793 met.; no gen.; pur. 404,058,887 kWh; rev. $8,200,248. (1944) 2

CLARK COUNTY PUD No. 1, 1200 Fort Vancouver Way, Box C-005, Vancouver, 98668, 206/699-3000, Bruce Bosch, actg. gen. mgr.; 79,764 met.; no gen.; pur. 2,791.5 million kWh; rev. $38,975,925. (1942) 1

COULEE DAM, City of, Light Dept., 300 Lincoln, Box 156, 99116, 509/633-1091, Donald E. Thoren, supt.; 555 met.; no gen.; pur. 20,928,663 kWh; rev. $292,440. (1959) 2

COWLITZ COUNTY PUD No. 1, 960 Commerce Ave., Longview, 98632, 206/423-2210, Robert L. McKinney, gen. mgr.; 36,330 met.; gen. 70,000 kW hydro, 200,948,000 kWh; sales 4,150,280,784 kWh; rev. $44,337,758. (1936) 2

DOUGLAS COUNTY PUD No. 1, 1151 Valley Mall Pkwy., East Wenatchee, 98801, 509/884-7191, Fred W. Lieberg, Mgr.; 10,414 met.; gen. 820,000 KW hydro, 4,322,769,000 kWh; sales 872,682,110 kWh; rev. $24,436,020. (1936) 2

EATONVILLE Power & Light Co., Box 309, 98328, 206/832-3361, Joe Sander, supt.; 420 met.; no gen. (1913)

ELLENSBURG, City of, Light Dept., 420 N. Pearl St., 98926, 509/962-9863, Thomas J. Chini, Dir. of Pub. Wks., 4,980 met.; no gen.; sales 138,193,000 kWh; rev. $2,772,348. (1899) 2

FERRY COUNTY PUD No. 1, 686 S. Clark Ave., Box 324, Republic, 99166, 509/775-3325, Richard H. Windsor, mgr.; 2,151 met.; no gen.; sales 55,434,360 kWh; rev. $1,553,229. (1936) 2

FIRCREST, Town of, 115 Ramsdell St., Tacoma, 98466, 206/564-8900, Wayne D. Mayhall, dir. pub. wks.; 2,105 met.; no gen.; pur. 42.1 million kWh; rev. $550,000. (1929)

FRANKLIN COUNTY PUD No. 1, Box 2407, Pasco, 99301, 509/547-5591, Kenneth R. Engstrom, mgr.; 15,536 met.; no gen.; sales 537,650,000 kWh; rev. $9,187,929. (1934) 2

GRANT COUNTY PUD No. 2, 30 C St., SW, Box 878, Ephrata, 98823, 509/754-3541, John L. McMahan, mgr.; 26,736 met.; gen. 1,619,750 kW hydro, 9,907.1 million kWh; pur. 103.3 million kWh; rev. $47,267,583. (1942) 1

GRAYS HARBOR COUNTY PUD No. 1, Box 480, Aberdeen, 98520, 206/532-4220, Ron Saville, gen. mgr.; 34,490 met.; gen. 53,192; 295,129,508 kWh; sales 1,519,129,508 kWh; rev. $25,924,661. (1938) 2

JEFFERSON COUNTY PUD No. 1, Jefferson County Courthouse, Port Townsend 18368, 206/385-5800, J. Richard Kint., dist. mgr. **(Jefferson County PUD No. 1 has preliminary permits for investigating hydroelectric sites but will need voter approval before constructing electric facilities.)**

KITTITAS COUNTY PUD No. 1, 1400 E. Vantage Hwy., Ellensburg, 98926, 509/925-3164, Floyd M. Weir, mgr.; 1,686 met.; no gen.; sales 33,120,450 kWh; rev. $888,119. (1936) 2

KLICKITAT COUNTY PUD No. 1, 1313 S. Columbus, Goldendale, 98620, 509/773-5891, Alexander Thomson, gen. mgr.; 7,860 met.; no gen.; sales 215,541,017 kWh; rev. $4,878,360. (1936) 2

LEWIS COUNTY PUD No. 1, 321 N.W. Pacific Ave., Chehalis, 98532, 206/748-9261, Gary H. Kalich, mgr.; 19 903 met.; no gen.; sales 627,809,680 kWh; rev. $11,596,919. (1936) 2

MASON COUNTY PUD No. 1, Rte. 5, Box 555, Shelton, 98584, 206/877-5249, John P. Robertson, mgr.; 3,563 met.; no gen.; sales 49,399,561 kWh; rev. $1,347,009. (1936) 2

MASON COUNTY PUD No. 3, Box 490, Shelton, 98584, 206/426-8255, Dennis E. Rohr, gen. mgr.; 21,361 met.; no gen.; sales 362,860,917 kWh; rev. $9,692,318. (1934) 2

McCLEARY Light and Power, Box 360, 98557, 206/495-3264, Mark Stauffer, utils. coord.; 787 met.; no gen.; pur. 34.2 million kWh; rev. $440,368. (1944) 1

MILTON, Town of, Box "D," 98354, 206/922-8733, Robert J. Smart, supt. of pub. works; 1,500 met.; no gen.; pur. 28.9 million kWh; rev. $450,217. (1947) 1

OKANOGAN COUNTY PUD No. 1, Box 912, Okanogan, 98840, 509/422-3310, Harlan Warner, mgr.; 15,950 met.; no gen.; sales 445,057,021 kWh; rev. $8,440,218. (1945) 2

PACIFIC COUNTY PUD No. 2, 405 Duryea St., Box 472, Raymond, 98577, 206/942-2411, John E. Dunsmoor, mgr.; 13,775 met.; no gen.; pur. 229.1 million kWh; rev. $4,677,826. (1940) 1

PEND OREILLE COUNTY PUD No. 1, Box 190, Newport, 99156, 509/447-3137, George Kennett, mgr.; 3,456 met.; gen. 60 MW hydro, 508,251,541 kWh; sales 512,357,719 kWh; rev. $3,421,601. (1936) 2

PORT ANGELES City Light, Dept. 240 W. Front St., Box 1150, 98362, 206/457-0411, Lew Cosens, dir.; 8,843 met.; no gen.; sales 699,435,229 kWh; rev. $8,642,000. (1893) 2

RICHLAND, City of, 505 Swift Blvd., Box 190, 99352, 509/943-9161, J. Keith Sedore, dir.; 14,000 met.; no gen.; pur. 550,000,000 kWh; rev. $11,345,628. (1958) 2

RUSTON Elec. Util., 5117 N. Winnifred St., Ruston (Tacoma), 98407, 206/759-3544, Hubert Glenn Roberts, supt.; 335 met.; no gen.; pur. 4,914,000 kWh; rev. $81,955. (1928) 2

SEATTLE City Light, 1015 Third Ave., 98104, 206/625-3000, Joseph P. Recchi, supt.; 293,589 met.; gen. 1,471,300 kW hydro, 26,000 kW oil; sales 8,457,121,000 kWh; rev. $133,836,086. (1902) 2

SKAMANIA COUNTY PUD No. 1, Box 500, Carson, 98610, 509/427-5126, William F. Yee, mgr.; 3,913 met.; no gen.; pur. 112,738,000 kWh; rev. $2,460,000. (1938) 2

SNOHOMISH COUNTY PUD No. 1, 2320 California Ave., Box 1107, Everett, 98206, 206/258-8211, William G. Hulbert Jr., mgr.; 150,040 met.; no gen.; sales 4,692,847,013 kWh; rev. $93,894,644. (1949) 2

STEILACOOM, Town of, 1715 Lafayette St., 98388, 206/582-1900, Jim Richards, util. supt.; 2,011 met.; no gen.; pur. 39,074,595 kWh; rev. $773,802. (1914) 2

SUMAS, Town of, Cherry St., Box 5, 98295, 206/988-4713, Lawrence Silvis, util. supt.; 378 met.; no gen.; pur. 4.5 million kWh; rev. $146,138. (1922) 1

TACOMA, City of, Dept. of Pub. Utils., Light Div., Box 11007, 3628 S. 35th St., 98411, 206/383-2471, Paul J. Nolan, dir. of utils.; 106,265 met.; gen. 771,700 kW; 659,700 kW hydro, 112,000 kW coal; 2,506,600 kWh; pur. 3,183,160 kWh; rev. $61,665,610. (1893) 2

VERA WATER AND POWER DISTRICT, 601 N. Evergreen Rd., Veradale, 99037, 509/924-3800, Joseph W. Custer, gen. mgr.; 5,179 met.; no gen.; sales 141,749,625 kWh; rev. $2,416,015. (1933) 2

WAHKIAKUM COUNTY PUD No. 1, Box 248, Cathlamet, 98612, 206/795-3266; Charles W. Weber, mgr.; 1,724 met.; no gen.; pur. 38,954,446 kWh; rev. $891,296. (1940) 2

WATERVILLE, Town of, Elec. Util., Box 580, 98858, 509/845-3271, C. A. Smith, supt.; 560 met.; no gen.; pur. 13.5 million kWh; rev. $225,683. (1902) 1

WHATCOM COUNTY PUD, 215 Mason Bldg., Bellingham, 98225, 206/384-1410, Frank Spisak, mgr.; 3 met. (Mobil Oil Co. and two water-treatment plants); no gen.; pur. 106,228,000 kWh; rev. $1,101,198. (1954) 2

WEST VIRGINIA

NEW MARTINSVILLE Mun. Utils., 201 Main St., 26155, 304/455-3442, W. L. Drennen, supt.; 1,928 met.; no gen.; pur. 23,562,000 kWh; rev. $902,213. (1929) 2

PHILIPPI, City of, 108 N. Main St., 26416, 304/457-3701, Joseph P. Mattaliano, city mgr.; 1,638 met.; no gen.; pur. 26,668,800 kWh. rev. $1,156,299. (1939) 2

WISCONSIN

ALGOMA Util. Comm., 520 Parkway Ave., 54201, 414/487-5556, Roland C. LeCloux, supt.; 1,772 met.; no gen.; sales 29,113,000 kWh; rev. $1,186,195. (1903) 2

ARCADIA Elec. Util., 115 S. Jackson St., 54612, 608/323-7347, Ronald L. Darbo, supt.; 1,140 met.; gen. 6,143 kW, 3,053 kW oil-fired, 3,090 kW dual-fuel, 324,410 kWh; sales 24,828,415 kWh; rev. $1,013,270. (1903) 2

ARGYLE Mun. Elec. & Water Dept., 53504, 608/543-3335, Rick Phillipson, supt.; 410 met.; gen. 1,540 kW oil-fired eng.; 50 kW hydro; 216,360 kWh; pur. 4,785,800 kWh. 2

BANGOR Mun. Util., 54614, 608/486-2151, Wesley Kjame, mgr.; 840 met.; no gen.

BARRON Light & Water Dept., 1303 E. Division Ave., 54812, 715/537-3855, David Hoff, supt.; 1,334 met.; gen. 5,252 kW, 5,060 kW oil-fired, 192 kW hydro, 481,705 kWh; sales 23,834,543 kWh; rev. $1,025,633. (1908) 2

BELMONT Mun. Light & Water Util., 222 Mound Ave., 53510, 608/762-5142, Tom Buss, supt.; 408 met.; no gen.; sales 3,174,000 kWh; rev. $138,767. (1900) 2

BENTON Elec. & Water Util., 53803, 608/759-3721, Tom Frazier, supt.

BLACK EARTH Elec. Util., 1210 Mill St., 53515, 608/767-2563, Jon Zimmerman, supt.; 843 met.; no gen.; sales 9,231,800 kWh, rev. $473,374. 2

BLACK RIVER FALLS Mun. Utils., 119 N. Water St., 54615, 715/284-9463, Delmar D. Dahl, util. adm.; 2,166 met.; gen. 4,140 kW, 3,210 kW oil-fired, 930 kW hydro, 3.3 million kWh; pur. 32.3 million kWh; rev. $1,184,373. (1904) 1

BLOOMER Elec. & Water, 1503 Main St., 54724, 715/568-3331, Charles H. Cole, mgr., 1,536 met.; no gen.; pur. 30,475,200 kWh; rev. $1,090,801. (1902) 2

BOSCOBEL Mun. Util., 740 Commercial Row, 53805, 608/375-5429, Bruce Folbrecht, Admin.; 1,453 met., no gen.; sales 22,207,884 kWh; rev. $948,150. 2

BRODHEAD Water & Lighting Comm., 1108 11th St., 53520, 608/897-2505, Carrol Sheafor, supt.; 1,586 met.; no gen.; sales 18,991,000 kWh; rev. $819,159. (1913) 2

CADOTT Light & Water Util., Village Hall, Box 37, 54727, 715/289-4282, Leona Hart, sec.-treas.; 583 met.; no gen.; pur. 258,283 kWh; rev. $332,775. 2

CASHTON Mun. Light & Water, 709 Main St., 54619, 608/386-5160, John Hauser, supt., 650 met.; gen. 750 kW oil-fired eng., 1,163 kW dual-fuel eng.; 5,000 kWh; pur. 4.5 million kWh; rev. & 81,000. (1909) 2

CEDARBURG Light & Water Comm., N30 W5926 Lincoln Blvd., Box 82, 53012, 414/377-1280, Glenn W. Frank, mgr.; 4,207 met.; no gen.; pur. 78,241,000 kWh; rev. $3,485,359. (1901) 2

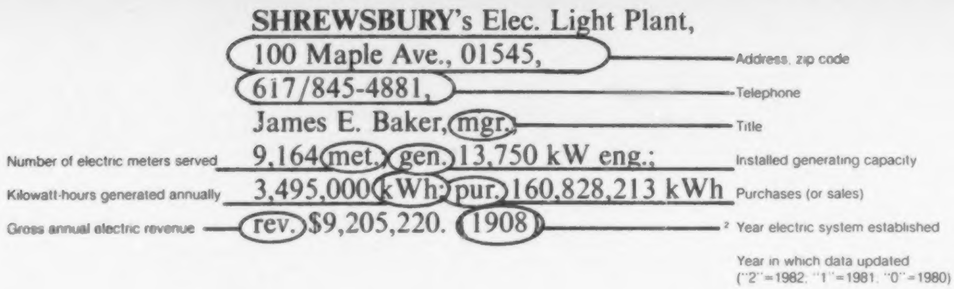
CENTURIA Mun. Elec. Util., 54824, 715/646-2300, Glenn Melin, pres.; 374 met.; no gen.; pur. 4.1 million kWh; rev. $153,894. (1946) 6

CLINTONVILLE Water & Elec. Util., 64 E. Twelfth St., Box 359, 54929, 715/823-3518, John H. Schroeder, supt.; 3,412 met.; no gen.; pur. 40,695,633 kWh; rev. $1,654,445. 2

COLUMBUS Water & Light Dept., 361 N. Water St., 53925, 414/623-3100, Grant E. Allar, supt.; 1,910 met.; no gen.; sales 30,644,000 kWh; rev. $1,342,407. (1899) 2

CORNELL Mun. Elec. Util., 222 Main St., Box 796, 54732, 715/239-6522, Russell M. Ellingson, mgr.; 745 met.; no gen.; pur. 8,825,306 kWh; rev. $336,364. 2

CUBA CITY Mun. Elec. & Water Plant, 108 N. Main, 53807,


SHREWSBURY's Elec. Light Plant,
100 Maple Ave., 01545,
617/845-4881,
James E. Baker, mgr.,
9,164 met.; gen. 13,750 kW eng.;
3,495,000 kWh; pur. 160,828,213 kWh
rev. $9,205,220. (1908) 2
Address, zip code
Telephone
Title
Number of electric meters served
Installed generating capacity
Kilowatt-hours generated annually
Purchases (or sales)
Gross annual electric revenue
Year electric system established
Year in which data updated
("2"=1982, "1"=1981, "0"=1980)

WISCONSIN
(continued)

608/744-2152, Melvin Domres, Dir. of Pub. Wks.; no gen.; pur. 12,892,800 kWh; rev. $505,385. (1921) 2

CUMBERLAND Mun. Util., 1265 Second Ave., 54829, 715/822-8298 or 822-2595, Charles Christensen, gen. mgr.; 1,238 met.; gen. 8,650 kW oil-fired, 2,050 kW dual-fuel, 854,870 kWh; pur. 18.7 million kWh; rev. $1,334,806. (1898) 1

DEERFIELD Elec. & Water Util., 113 N. Main, 53531, 608/764-5414, David R. Molstap, mgr.; 615 met.; no gen.; pur. 8.5 million kWh; rev. $348,117. (1915) 1

EAGLE RIVER Light & Water Dept., Box 218, 54521, 715/479-8121, Lee McFaul, supt.; 1,225 met.; no gen.; sales 18,870,715 kWh; rev. $757,732. (1898) 2

ELKHORN Light & Water Comm., 23 W. Walworth Ave., 53121, 414/723-2910, Anthony F. Biba, supt.; 2,387 met.; no gen.; sales 46,601,000 kWh; rev. $1,879,154. (1898) 2

ELROY Light & Water Util., 102 Liberty St., Box 929, 53929, 608/462-8245, Royce Lockner, util. mgr., 929 met.; gen. 9,600 kWh dual-fuel eng.; pur. 12,264,655 kWh; rev. $442,797. (1899) 2

EVANSVILLE Water & Light Dept., 31 S. Madison St., 53536, 608/882-4422, Wayne E. Ballard, mgr.; 2,158 met.; no gen.; pur. 37,519,680 kWh; rev. $1,589,144. (1902) 2

FENNIMORE Mun. Utils., 860 Lincoln Ave., 53809, 608/822-6501, Charles J. Leuck, dir. pub. wks.; 1,155 met.; gen. 2,200 kW oil-fired, 20,200 kWh; sales 17,015,000 kWh; rev. $774,361. (1907) 2

FLORENCE Water & Light Comm., Box 67, 54121, 715/528-3330, Robert Friberg, supt.; 748 met.; no gen.; sales 7,151,000 kWh; rev. $336,688. (1898) 2

FOOTVILLE Elec. Comm., Center St., Box 187, 53537, 608/876-6581, Dale Kitelinger, supt.; 350 met.; no gen.; pur. 3,495,200 kWh; rev. $117,915. (1920) 2

GRESHAM Mun. Elec. Util., Main St., Box 157, 54128, 715/787-3244, Alvin Christ, supt.; 833 met.; gen. 3,494,800 kW hydro; sales 7,659,900 kWh; rev. $359,030. (1918) 2

HARTFORD Elec. Util., Box 31, 53027, 414/673-4000, L. M. Darin, dir.; 2,850 met.; no gen.; pur. 56,854,600 kWh; rev. $2,473,136. (1912) 2

HAZEL GREEN Elec., Box 367, 1610 Fairplay, 53811, 608/854-2953, Herman Richardson, dir. pub. wks.; 525 met.; no gen.; pur. 5,907,613 kWh; rev. $252,302. (1908) 2

HUSTISFORD Elec. Util., 53034, 414/349-3650, Steve Thompson, supt.; 750 met.; no gen.; pur. 6 million kWh. 0

JEFFERSON Water & Elec. Dept., 121 W. Racine St., 53549, 414/674-3313, H. R. Waraczynski, mgr.; 3,174 met.; no gen.; pur. 85.8 million kWh; rev. $2,412,000. (1901) 0

JUNEAU Util. Comm., Box 163, 53039, 414/386-3321, James Kirchoff, supt., 792 met.; no gen.; sales 22,182,339 kWh; rev. 933,142. 2

KAUKAUNA Elec. & Water Dept., 777 Island St., 54130, 414/766-5721, Ernest J. Mullen, gen. mgr.; 8,304 met.; gen. 41,000 kW, 20,000 kW gas turbine, 15,000 kW hydro, 6,000 kW oil-fired, sales 506,626,000, kWh; rev. $14,977,889. (1912) 2

KIEL Utils., City Hall, 621 Sixth St., 53042, 414/894-2669, Ralph H. Menne, supt., 1,640 met.; no gen.; pur. 29.9 million kWh; rev. $1,087,600. (1914) 1

LA FARGE Mun. Elec. Co., Box 838, 54639, 608/625-2333, Richard Herken, mgr.; 631 met.; no gen.; pur. 4,497,708 kWh; rev. $233,534. 2

LAKE MILLS Light & Water Dept., 101 Church St., 53551, 414/648-2344, Thomas George Popp Jr., city mgr.; 2,537 met.; no gen.; pur. 44,784,000 kWh; rev. $1,803,868. (1911) 2

LODI Mun. Light & Water Util., City Hall, 113 S. Main St., 53555, 608/592-3246, Rodney Maier, supt.; 994 met.; no gen.; sales 11,823,756 kWh; rev. $118,237. (1894) 2

MANITOWOC Pub. Utils., 1303 S. Eighth St., 54220, 414/683-4640, Edmund J. Garber, gen. mgr.; 26,768 met.; gen. 69,000 kW coal, 54,248,000 kWh; sales 264,004,000 kWh; rev. $9,638,670. (1914) 2

MARSHFIELD Elec. &Water Dept., 2000 S. Roddis Ave., 54449, 715/387-1195, Robert R. Pawelski, util, mgr.; 9,718 met.; gen. 29,000 kW coal, 10,000 kW oil or gas, 71,271,756 kWh; sales 208,245,192 kWh; rev. $8,920,750. (1904) 2

MAZOMANIE Electric, 133 Crescent St., 53560, 608/795-2217, Dean G. Sanftleben, village electrician, 600 met.; no gen.; pur. 7,101,600 kWh; rev. $310,355. 2

MEDFORD Elec. Util., 330 S. Whelen Ave., 54451, 715/748-3211, William J. Werner, mgr.; 2,387 met; no gen.; sales 53,652,074 kWh; rev. $2,257,455. (1944) 2

MENASHA Elec. & Water Utils., Box 340, 54952, 414/729-5180, James W. Austin, gen. mgr.; 6,497 met.; gen. 29,000 kW coal, 47,712,000 kWh; sales 111,609,362 kWh; rev. $5,366,959. (1905) 2

MERRILLAN Elec. Light & Water Dept., Pearl and Wisconsin Sts., 54754, 715/333-5377, George Geisler, supt.; 300 met.; gen. 237 kW, 162 kW eng., 75 kW hydro, 392,630 kWh; pur. 1.5 million kWh. (1902)

MT. HOREB Elec. Util., 138 E. Main St., 53572, 608/437-3084. Elwin K. Bendickson, mgr.; 1,863 met.; no gen.; pur. 29,224,800 kWh; rev. $1,202,887. (1939) 2

MUSCODA Light & Water Comm., 109 N. Second St., 53573, 608/739-3390, Joseph H. Drone, supt.; 843 met.; no gen.; pur. 12.3 million kWh; rev. $483,600. (1907) 0

NEW GLARUS Mun. Light & Water Wks., 313 2nd St., 53574, 608/527-2913, Orville R. Jorenby, supt.; 828 met.; no gen.; pur. 12,859,200 kWh; rev. $495,451. (1902) 2

NEW HOLSTEIN Pub. Utils., 2110 Washington St., 53061, 414/898-5776, Ernest R. Dyer Sr., supt. 1,927 met.; no gen.; sales 43,352,000 kWh; rev. $1,890,451. (1912) 2

NEW LISBON Mun. Light & Water Dept., 218 E. Bridge St., 53950, 608/562-3103, Fred J. Lorenz, supt., 695 met.; gen. 4,439 kW dual-fuel, 314,000 kWh; pur. 10,338,000 kWh; rev. $10,077,000. 2

NEW LONDON Utils., 400 E. North Water St., Box 304, 54961, 414/982-2650, Robert S. Houk, mgr.; 2,866 met.; no gen.; sales 117,128,000 kWh; rev. $4,685,580. (1903) 2

NEW RICHMOND Utils., 156 E. First St., 54017, 715/246-4167, Donald E. Preble, mgr., 2,049 met.; no gen.; sales 35,548,982 kWh; rev. $1,328,560. (1890) 2

OCONOMOWOC, City of, Utils., 630 S. Worthington St., 53066, 414/567-5483, Robert W. Nettnin, dir. of utils.; 5,311 met., no gen.; sales 106,223 kWh; rev. $4,405,652. (1900) 2

OCONTO FALLS Water & Light, Box 70, 54154, 414/846-2911, George Barber, dir. pub. wks.; 1,000 met.; no gen.; pur. 15,226,000 kWh; rev. $691,784. (1933) 2

PARDEEVILLE Elec. Comm., 124 Lake St., 53954, 608/429-3054, Larry Brown, foreman; 921 met.; gen. 88,815 kw hydro; sales 10,459,000 kWh; rev. $439,918. (1945) 2

PLYMOUTH Utils. Comm., 12 S. Milwaukee St., 53073, 414/893-1471, Chester J. Harrison, mgr., 4,962 met.; no gen.; pur. 103.9 million kWh; rev. $4,132,101. (1895) 1

PRAIRIE DU SAC Water & Light Dept., 560 Park Ave., 53578, 608/643-3133, Duane Browning, supt.; 680 met.; no gen.; pur. 5.4 million kWh; rev. $116,000.

PRINCETON Mun. Elec., 438 W. Main St., 54968, 414/295-6612, Duane G. Norem, mgr.; 878 met.; no gen.; sales 8,730,911 kWh; rev. $390,216. (1902) 2

REEDSBURG Util. comm., 344 S. Willow, 53959, 608/524-4381, Robert D. Utley, supt.; 2,472 met.; no gen.; pur. 69.6 million kWh; rev. $2,547,471. (1894) 1

RICE LAKE Elec. Util., 320 W. Coleman St., 54868, 715/234-7004, John E. Brandt, supt.; 3,800 met.; no gen.; pur. 84,093,380 kWh; rev. $2,964,000. (1918) 2

RICHLAND CENTER Mun. Elec. Util., Box 29, 53581, 608/647-3844, Richard J. Steiner, util. admr.; 2,739 met.; gen. 8,000 kW coal, 25,635,400 kWh; sales 59,837,000; rev. $3,231,424. (1904) 2

RIVER FALLS Mun. Utils., 115 E. Elm St., 54022, 715/425-5313, Elmer K. Thon Jr., util. adm.; 3,149 met.; gen. 13,069 kW, 4,960 kW oil-fired, 7,821 kW dual-fuel, 288 kW hydro; 14.8 million kWh; pur. 44.5 million kWh; rev. $2,472,776. (1900) 1

SAUK CITY Elec. & Water Dept., 806 Water St., 53583, 608/643-8336, or 643-3932, Donald Moen, util., supt.; 1,239 met.; no gen.; sales 19,814,000 kWh; rev. $895,155. (1909) 2

SHAWANO Mun. Utils., 122 N. Sawyer St., 54166, 715/526-3131, Lee A. Ebert, supt.; 4,015 met.; no gen.; sales 118,801 kWh; rev. $4,551,244. (1900) 2

SHEBOYGAN FALLS Utils., 511 Adams St., 53085, 414/467-6446, Robert Selchert, supt., 2,727 met.; sales 32,399,000 kWh; rev. $3,135,007. (1916) 2

SHULLSBURG Elec. Util., 112 S. Gratiot St., Box 580, 53586, 608/965-4901, Ronald Schardt, electrn; 700 met.; no gen.; pur. 6,446,810 kWh; rev. $348,637. (1937) 2

SLINGER Elec., Light & Water Dept., 110 Oak St., 53086, 414/644-5515, James S. Dickinson, supt.; 734 met.; no gen.; rev. $538,032. 1

SPOONER Mun. Elec. Util, City Hall, 54801, 715/635-2327, Robert J. La Page, supt.; no gen.

STOUGHTON Mun. Elec. Util., 211 Water St., Box 383, 53589, 608/873-3379, Robert P. Kardasz, dir. of pub. wks.; 5,084 met.; no gen.; 64.5 million kWh; rev. $2,748,297. (1890) 6

STRATFORD Elec., 54484, 715/687-4118, W. F. Lange, supt.; 562 met.; no gen.; pur. 6.9 million kWh; rev. $311,527. (1920) 6

STURGEON BAY Utils., 230 E. Vine St., Box 249, 54235, 414/743-5542, William Baudhuin, supt.; 6,069 met.; no gen.; sales 96,463,000 kWh; rev. $4,298,334. (1904) 2

SUN PRAIRIE Elec. Util., 125 W. Main St., 53590, 608/837-5500, George F. Straus, supt.; 5,021 met.; no gen.; sales 75,800,000 kWh; rev. $3,153,879. (1910) 2

TREMPEALEAU Mun. Elec. Dept., 50 E. Third St., 54661, 608/534-6434; Walter Hanson, mgr. & elec., 648 met.; no gen.; pur. 5,634,000 kWh; rev. $269,728. (1915) 2

TWO RIVERS Water & Light Dept., 1415 Lake St., 54241, 414/793-1191, ex. 41, William C. Pappathopoulos, dir. util.; 5,560 met.; no gen.; pur. 71,736,000 kWh; rev. $2,827,270. (1901) 2

VIOLA Mun. Elec. Util., Box 38, 54664, 608/627-1829; Kirby Hamilton, mgr.; 474 met.; gen. 1,076 kW oil-fired eng.; 11,400 kWh; pur. 3,786,042 kWh; rev. $162,290. 2

WATERLOO Water & Light, 122 St. Monroe St., 53594, 414/478-2260, John Foley, supt.; 1,415 met.; no gen.; sales 29,311,000 kWh; rev. $1,236,014. (1918) 2

WAUNAKEE Water & Light, 205 Klein Dr.,53597, 608/849-8111, Kenneth L. Fredrickson, supt.; 1,615 met.; no gen.; sales 27,646,000 kWh; rev. $1,231,064. (1915) 2

WAUPUN Pub. Utils., 220 N. Forest St., 53963, 414/324-3556, Albert F. Leu, mgr.; 3,045 met.; no gen.; pur. 54,026,419 kWh; rev. $2,133,159. (1894) 2

WESTBY Elec. & Water Util., 104 First St., 54667, 608/634-3416, Dean Warren, supvr.; 866 met.; no gen.; sales 13,054,999 kWh. (1902) 2

WHITEHALL Mun. Elec. Util., 1631 Main St., 54773, 715/538-4353, Larry H. Bocock, elec. supt.; 829 met.; no gen.; pur. 14,256,000 kWh; rev. $528,343. (1940) 2

WISCONSIN DELLS Elec. Util., 300 LaCrosse St., 53965, 608/253-2542, Kenneth D. Weber, dir. pub. wks.; 1,550 met.; no gen.; sales 24,478,000 kWh; rev. $1,151,651. (1894) 2

WISCONSIN RAPIDS Water Wks. & Lgt. Comm., 221 Sixteenth St., S., Box 399, 54494, 715/423-6300, Robert F. Dickinson, gen. mgr.; 10,009 met.; no gen.; pur. 163,931,400 kWh; rev. $6,488,528. (1890) 2

WONEWOC Elec. Util., Box 303, City Hall, 53968, 608/464-3114, Peter A. Carr; 576 met.; no gen.; pur. 5,822,400 kWh; rev. $221,419. 2

WYOMING

BASIN Mun. Light & Water Plant, Box 618, 82410, 307/568-2524, Frank Yeos, supt.; 700 met.; no gen.

CODY Mun. Elec. Dist. System, 1338 Rumsey Ave., 82414, 307/527-7513, Neal T. Olson, Supt.; elec. dept., 2,700 met.; no gen.; pur. 35.2 million kWh; rev. $2,873,922. (1935) 2

DEAVER Utils., 82421, S. E. Dillon, mgr.; 52 met.; no gen.

FORT LARAMIE, Town of, Box 177, 82212, 307/837-2711, Joyce Gilchriest; 160 met.; no gen.; pur. 1,207,800 kWh; rev. $101,597. 2

GILLETTE Mun. Elec. Util., Box 3003, 82716, 307/686-5264, Glen W. Taylor, dir. pub. wks.; 6,528 met.; no gen.; pur. 107,535,000 kWh; rev. $4,300,793. (1915) 2

GUERNSEY Elec. Dept., 82214, 307/836-2522, Pete Green, town supt.; 591 met.; no gen. 2

LINGLE, Town of, 82223, 307/837-2422, Harry Bremer, supt.; 276 met.; rev. $78,884. 2

LUSK Light & Power Dept., Box 385, 82225, 307/334-3612, Alvin G. Titchener, supt. pub. wks.; 1,300 met.; no gen.; pur. 277,108 kWh; rev. $390,475. (1919) 2

PINE BLUFFS, Town of, Box 378, 82082, 307/245-3746, Ronald Spier, supt.; 773 met.; no gen.; rev. $310,853. (approx. 1910) 2

POWELL, City of, 270 N. Clark St., Box 1008, 82435, 307/754-5106, Raymond Lutterman, gen. commr.; 2,389 met.; no gen.; sales 24,335,000 kWh; rev. $726,294. (1921) 2

TORRINGTON Mun. Elec. Dept., 336 W. Railroad, 82240, 307/532-2422, Lawrence Mitchell, supt.; 3,167 met.; no gen.; pur. 32.6 million kWh; rev. $1,200,000. (1914) 1

UPTON Mun. Light & Power Dept., 82730, 307/468-2626, D. L. Eisenhauer, mayor; 350 met.; no gen.; pur. 3.2 million kWh; rev. $85,279. (1948)

WHEATLAND, Town of, 600-9th St., 82201, 307/322-2962, J. R. Dunham, mayor; 2,200 met.; no gen.; pur. 31,321,000 kWh; rev. $1,356,890. (1936) 2

AMERICAN SAMOA

AMERICAN SAMOA POWER AUTHORITY, Pago Pago, American Samoa, 96799, 633-5251, Robert E. Keith, executive director, 4,700 met.; gen. 24,000 kW eng., 60 million kWh; pur. none; rev. $4,200,000. 1

CANAL ZONE

PANAMA CANAL Commission, APO Miami 34011, phone 52-3421, Frank A. Lee, chief, elec. div.; 4,820 met.; gen. 162,000 kW, 55,500 kW oil, 60,000 kW gas turbine, 46,500 kW hydro, 553 million kWh; pur. 12 million kWh; rev. $26,612,000. (1914) 1

GUAM

GUAM POWER AUTHORITY, Box 2977, Agana, Guam, 96910-2977, 472-6801, Frank G. Blaz, gen. mgr.; 24,387 met.; gen. 314,000 kW, 282,000 kW oil, 32,000 kW oil-fired engine, 1,013.9 million kWh; pur. none; rev. $49,897,652. (1968) 1

PUERTO RICO

PUERTO RICO ELECTRIC POWER AUTHORITY, Box 4267, San Juan, P.R., 00936, 809/724-8980, Wilfredo Marcial, acting exec. dir.; 1,002,342 met.; gen. 4,206,680 kW, 3,080,000 kW steam (oil), 434,000 kW gas turb., 592,000 kW comb. cycle, 2,500 kW eng., 98,180 kW hydro, 200 kW wind (experimental); 10,997,000,000 kWh; sales 10,836,885,000 kWh; rev. $1,166,723,000. (1949) 2

VIRGIN ISLANDS

VIRGIN ISLANDS WATER AND POWER AUTHORITY, Box 1450, Charlotte Amalie, St. Thomas, U.S. Virgin Islands, 00801, 809/774-3552, Thomas R. Blake, exec. dir.; 38,040 met.; gen. 202,200 kW, 86,000 kW oil, 16,200 kW oil-fired, 100,000 kW gas turbine, 443.9 million kWh; pur. 348 million kWh; rev. $53,042,918. (1965) 1

ORGANIZATIONS OF LOCAL SYSTEMS

NATIONAL ASSOCIATION

AMERICAN PUBLIC POWER ASSOCIATION, 2301 M St. N.W., Washington, D.C. 20037, 202/775-8300, Alex Radin, exec. dir.; James E. Baker, Shrewsbury's Electric Light Plant, Shrewsbury, Mass., pres.; Robert L. McKinney, Cowlitz County Public Utility District, Longview, Wash., pres.-elect.; J.K. Spruce, Public Service Board, San Antonio, Texas, vice pres.; C.M. Perkins, Salt River Project, Phoenix, Ariz., treas.

REGIONAL ASSOCIATIONS

COMMITTEE ON POWER FOR THE SOUTHWEST, Box 1360, Suite 3, 400 S. Broadway, Edmond, Okla. 73083, 405/340-1900, Michael McDowell, exec. dir.; Wayne DuBose, Jasper, Texas, chmn.; Walter E. Oestreich, Callaway Electric Co-op., Fulton, Mo., vice pres.; Maynard Human, Western Farmers Electric Cooperative, Anadarko, Okla., sec.-treas.

INTERMOUNTAIN CONSUMER POWER ASSOCIATION, 8722 S. 300 West, Sandy, Utah 84070, 801/566-3933, Dennis B. Horman, gen. mgr.; R. Leon Bowler, Beryl, Utah, pres.; Ted L. Olson, Ephraim, Utah, vice pres.; Ray Farrell, Heber, Utah, sec.; Vaun Bethers, Logan, Utah, treas.

MID-WEST ELECTRIC CONSUMER ASSOCIATION, Suite 300, Evergreen Executive Bldg., 27972 Meadow Drive, Box 910, Evergreen, Colo. 80439, 303/674-6676, Fred G. Simonton, exec. dir.; Robert McColly, Central Montana G&T, Hinsdale, Mont., pres.; Joseph Brus, Lyon-Lincoln REC Tyler, Minn., vice-pres.; Louis Stroup Jr., McPherson, Kan., sec.-treas.

MISSOURI BASIN SYSTEMS GROUP, Box 2327, Estes Park, Colo. 80517; 303/586-2393; Robert F. Risch, exec. dir.; Dennis Lindberg, Odebolt, Iowa, pres.; Harvey Malon, Rushmore, S.D., sec.-treas.

NORTHEAST PUBLIC POWER ASSOCIATION, Suite 104, 148 Linden St., Wellesley, Mass. 02181, 617/237-9126, Chapman Stockford, gen. mgr.; Charles Walters, Wallingford, Conn., pres.; William J. Wallace, Wakefield, Mass., vice pres.; Howard Peters, Pascoag, R.I., second vice pres.; William F. O'Connor, Taunton, Mass., sec.; Robert O. Toombs, East Montpelier, Vt., treas.

NORTHWEST PUBLIC POWER ASSOCIATION, 1310 Main St., Box 1307, Vancouver, Wash. 98666, 206/694-6553, Norman C. Jacox, gen. mgr.; Tom Campbell, Idaho Falls, Idaho, pres.; Jerry Overs, Salem, Ore., vice pres.; Jim Smith, Northern Canada Power Commission, treas.

SEMO-NEARK MUNICIPAL UTILITIES ASSOCIATION, 110 W. Main, Malden, Mo. 63863, 314/276-2419, Ray Lyons, Malden, pres.; Carl Talley, Jackson, Mo., vice pres.; Ted Bellars, 194 Court St., Piggott, Ark. 72454, sec.-treas.

SMALL (NORTHWEST) PREFERENCE AGENCIES, Heyburn, Idaho 83336, 208/678-8158, Larry Burbank, Heyburn, Idaho, pres.; Joseph Helgeson, 406/775-5483, Flathead Electric Cooperative, Kalispell, Mont., vice pres.

PUBLIC POWER COUNCIL, 500 W. 8th St., Vancouver, Wash. 98660; 206/694-8598; Robert M. Greening Jr., mgr.; Jerry Overs, Salem, chmn.

TENNESSEE VALLEY PUBLIC POWER ASSOCIATION, 831 Chestnut St., Chattanooga, Tenn. 37402, 615/756-6511, Jerry L. Campbell, exec. dir.; Tom Wheeler, Marshall-DeKalb EC, Boaz, Ala., pres.; Don Collette, McMinnville, vice pres.; Hubert Williams, Southwest Tenn. EC, Brownsville, sec.-treas.

STATE ASSOCIATIONS

MUNICIPAL ELECTRIC UTILITY ASSOCIATION OF ALABAMA, Box 87, Lafayette, Ala. 36862, 205/864-2211, Edward Yeargan, chmn.; Dale Baker, Sylacauga, vice chmn.; Raimon Thomas, Dothan, sec.-treas.

ARIZONA MUNICIPAL POWER USER'S ASSOCIATION, Suite 1205, 3003 N. Central Ave., Phoenix, Ariz. 85012, 602/248-0372, Michael A. Curtis, exec. sec.; Jerry Flanders, Arizona Electric Power Cooperative, Benson, pres.; Dalton Cole, Coolidge, vice pres.; Wm. J. Metheny, Electrical District No. 2, Coolidge, sec.; James Guinane, treas.

CALIFORNIA MUNICIPAL UTILITIES ASSOCIATION, Suite 103, 1213 K St., Sacramento, Cal. 95814, 916/441-1733, Gerald L. Jordan, exec. dir.; Bill Fell, Glendale Public Service Dept., pres.; Evan L. Griffith, Metropolitan Water District, Los Angeles, vice pres.; Harold Guetersloh Jr., San Francisco, treas.; Ernest Geddes, Turlock Irrigation Dist., sec.

NORTHERN CALIFORNIA MUNICIPAL ELECTRIC ASSOCIATION, Box 320, 221 W. Pine St., Lodi, Cal., 95241, 209/334-5634, David Curry, Lodi, pres.; Maerose Evans, Alameda, treas.

COLORADO ASSOCIATION OF MUNICIPAL UTILITIES, Box 1200, Estes Park, 80517, 303/586-5331, Robert Dekker, Estes Park, pres.; Kevin Wailes, Lamar, vice pres.; Darrell Davis, Center, second vice pres.; Lowrye Hermes, Colorado Springs, sec.-treas.

CONNECTICUT MUNICIPAL ELECTRIC & GAS ASSOCIATION, Box 190, 100 John St., Wallingford, Conn. 06492, 203/265-1593, Ray Smith, Wallingford, acting pres.; Wm. Lyons, East Norwalk, sec.

FLORIDA MUNICIPAL UTILITIES ASSOCIATION, Box 10114, Suite 842, Barnett Bank Bldg., 315 S. Calhoun, Tallahassee, Fla. 32302, 904/224-3314, E.C. Shreve Jr., exec. vice pres.; B.W. "Pete" Wait III, pres.; J. Claude L'Engle, Lake Worth, pres.-elect.; J.R. "Buddy" Fort Jr., vice pres.; Joe B. Dykes Jr., Tallahassee, sec.-treas.

ELECTRICITIES OF GEORGIA, 34 Peachtree St., Suite 2300, Atlanta, Ga. 30303, 404/688-0472, James H. Smith, Fitzgerald, chmn.; Mayor Thomas Lawhorne, Sylvester, vice chmn.

ILLINOIS MUNICIPAL UTILITIES ASSOCIATION, 522 E. Monroe, Suite 707, Springfield, Ill. 62701; 217/523-3532; Ivan L. Schraeder, exec. dir.; Frank Roby, Bethany, pres.; Pat Boyle, St. Charles, first vice pres.; Victor Marma, Naperville, second vice pres.; M. Stephen Finn, Princeton, sec.-treas.

INDIANA MUNICIPAL ELECTRIC ASSOCIATION Box 2648, Anderson, Ind. 46011, 317/643-2075, Robert L. Rock, exec. sec.; John Shelburne, Frankfort, pres.; James B. Nelson, Lebanon, sec.-treas.

IOWA ASSOCIATION OF MUNICIPAL UTILITIES, Room 520, Insurance Exchange Bldg., Des Moines, Iowa, 50309, 515/282-0904, Bart Rule, exec. dir.; Dean Johnson, Des Moines, pres.; John Miller, Eldridge, vice pres.; Robert Colyer, Lamoni, vice pres.; Don Fahlenkamp, Montezuma, sec.-treas.

NORTH IOWA MUNICIPAL ELECTRIC COOPERATIVE ASSOCIATION, Box 445, Legion Bldg., Humboldt, Iowa 50548, 515/332-2981, Richard Johnson, Humboldt, exec. vice pres.; Ron Deiber, Alta, pres.; Robert Jergens, Sumner, vice pres.; Lyle W. Hartwig, Laurens, sec.; Norm Parsons, Milford, treas.

KANSAS MUNICIPAL UTILITIES, INC., Box 1225, McPherson, Kan. 67460, 316/241-1423, Louis Stroup Jr., exec. dir.; Pete Sharp, Sharon Springs, pres.; Ben Payton, Kingman, pres.-elect.; Ron Arnold, Larned, first vice pres.; Richard Talley, Neodesha, second vice pres.; Henry Crosby, McPherson, sec.-treas.

KENTUCKY MUNICIPAL ELECTRIC POWER ASSOCIATION, 214 W. Main St., Frankfort, Ky. 40601, 502/223-2063, Lyle D. Cobb, exec. dir.; G.P. Rains, Corbin, pres.; Walter Smith, Princeton, vice pres.; G. Paul White, Glasgow, sec.-treas.

MUNICIPAL ELECTRIC ASSOCIATION OF MASSACHUSETTS, 80 Commercial St., Marblehead, Mass. 01945, 617/631-0240, Robert W. Gould, Ashburnham, pres.; Herve L. Plasse, Chicopee, first vice pres.; Richard O'Neil, Concord, second vice pres.; Richard L. Bailey, Marblehead, sec.-treas.

MICHIGAN MUNICIPAL ELECTRIC ASSOCIATION, 818 Cowley Ave., East Lansing, Mich. 48823, 517/351-6469, S. Don Potter, exec. vice pres.; Lyle Blaschka, Portland, pres.; Dale Simmons, Wyandotte, vice pres.; Clarence G. Pincumbe, Lansing, treas.

MINNESOTA MUNICIPAL UTILITIES ASSOCIATION, Box 459, 401 E. Highway 55, Buffalo, Minn., 55313-0459, 612/682-4104, Dick Kirkham, exec. dir.; David M. Martin, Owatonna, pres.; William Radio, Chaska, first vice pres.; Richard Anderson, North Branch, second vice pres.; Jeffrey J. Muehler, Breckenridge, sec.-treas.

MISSOURI ASSOCIATION OF MUNICIPAL UTILITIES, Box 401, 380 E. High St., Jefferson City, Mo. 65102, 314/635-4526, Wendell Locke, exec. sec.; Ray Callahan, Vandalia, pres.; Bob Barnette, Independence, first vice pres.; Bob Carter, Kirkwood, second vice pres.; Paul Jensen, Macon, sec.-treas.

UTILITIES SECTION OF THE NEBRASKA LEAGUE OF MUNICIPALITIES, 1335 L St., Lincoln, Neb. 68508, 402/476-2829, David L. Chambers, director; George Wolverton, asst. in charge of utilities; Lambert Blecha, Auburn, pres.

MUNICIPAL ELECTRIC GENERATON ASSOCIATION (MEGA), Box 900, Farmington, N.M. 87499, 505/327-7701, Dwight D. Arthur, Farmington, sec.

MUNICIPAL ELECTRIC UTILITIES ASSOCIATION OF NEW YORK STATE, 119 Washington Ave., Albany, N.Y. 12210, 518/463-0451, Frank Noble, exec. dir.; George D. Reich, Plattsburgh, pres.; Wesley G. Ryder, PennYan, pres.-elect.; Robert N. Vaisey, vice pres.; James A. Buff, Skaneateles, vice pres.; Betty Aiken, Theresa, sec.; James S. Pullan, Jamestown, treas.; John Rathbone, Hamilton, trustee; John W. Gilbert, Boonville, trustee.

ELECTRICITIES OF NORTH CAROLINA, Box 95162, Raleigh, N.C. 27625, 919/876-9170, Ralph W. Shaw, exec. dir.; Mayor George Clay Jr., Shelby, pres.; Mayor Kenneth B. Baker, Smithfield, first vice pres.; Councilman Richard Thomas, Lexington, second vice pres.; J.A. Wooten Jr., Farmville, sec.; T. Bruce Boyette, Wilson, treas.

NORTH CAROLINA ASSOCIATION OF MUNICIPAL ELECTRIC SYSTEMS, Box 3069, Raleigh, N.C. 27602, 919/834-1311, Doug Hathaway, Tarboro, pres.; Dale Herron, Morganton, vice pres.; Ben Taylor, sec.-treas.

NORTH DAKOTA ASSOCIATION OF MUNICIPAL POWER SYSTEMS, Box 240, Valley City, N.D. 58072, 701/845-2210, Truman Wold, Northwood, pres.; Robert Griffin, Valley City, sec.-treas.

OHIO MUNICIPAL ELECTRIC ASSOCIATION, Box 21315, 1560 Fishinger Road, Columbus, Ohio 43221, 614/457-1274, John W. Bentine, interim exec. sec.; John Rodgers, Hudson, pres.; Gerald Butterfield, Galion, vice pres.

MUNICIPAL ELECTRIC SYSTEMS OF OKLAHOMA, c/o Oklahoma Municipal League, 201 N.E. 23rd St., Oklahoma City, Okla. 73105, 405/528-7564, Shane Woolbright, ex. dir.; Karl Stadler, Stillwater, pres.; Roy Hunter, Purcell, pres.-elect.; Lewis Garber, Edmond, vice pres.; Don Howland, Duncan, sec.-treas.

LEAGUE OF PUBLICLY OWNED UTILITIES OF OREGON, 1201 Court St. NE, Box 928, Salem, Ore. 97308, 503/588-6466, Larry Schwartz, exec. dir.; James A. Swayne, Milton-Freewater, pres.; Brian L. Almquist, Ashland, vice pres.; Doug Sleeth, Forest Grove, sec.-treas.

OREGON PUD ASSOCIATION, Box 621, The Dalles, Ore. 97058, 503/296-2227, Dick Overman, Northern Wasco Co. PUD, pres.; Don DeFreese, Central Lincoln PUD, vice pres.; Fred Spivey, Northern Wasco Co. PUD, sec.-treas.

PENNSYLVANIA MUNICIPAL ELECTRIC ASSOCIATION, 212 Locust St., Box 1266, Harrisburg 17108, 717/233-5704, William F. Matson, exec. sec.; Edward Olander, Lansdale, pres.; Victor Dickinson, Ephrata, vice pres.; Lee Mangan, Lansdale, sec.; Paul Bradtmiller, Middletown, treas.; Anthony Adonizio, counsel.

SOUTH CAROLINA ASSOCIATION OF MUNICIPAL POWER SYSTEMS, Box 349, Laurens, S.C. 29360, Coleman Smoak, Laurens, pres.; Terry Hill, Gaffney, vice pres.; Ken Barnett, Union, sec.-treas.

SOUTH DAKOTA MUNICIPAL ELECTRIC ASSOCIATION, 214 E. Capitol, Pierre, S.D. 57501, 605/224-8654, Robert H. Miller, exec. sec.; Pete Swanson, Watertown, pres.; Richard Larson, Madison, vice pres.

TENNESSEE MUNICIPAL ELECTRIC POWER ASSOCIATION, Box 311, 200 Bob Dey Bldg., Peach Court and Wilson Pike Circle, Brentwood, Tenn. 37027, 615/373-5738, T.O. Walker, exec. dir.; Ernest R. Brown, Dickson, pres.; R. Michael Browder, Bristol, vice pres.; Jimmy Barnett, Jackson, sec.-treas.

TEXAS PUBLIC POWER ASSOCIATION, 8920 Business Park Dr., Suite 275, Austin, Texas 78759, 512/346-3780, R. Michael Simmons, exec. dir.

MUNICIPAL ELECTRIC ASSOCIATION OF VERMONT, Box 325, Morrisville, Vt. 05661, 802/626-3366, Kenneth Mason, Lyndonville, pres.; Robert B. Page, Morrisville, sec.-treas.

MUNICIPAL ELECTRIC POWER ASSOCIATION OF VIRGINIA, 311 Ironfronts, 1011 E. Main St., Richmond, Va. 23219 (Box 753, Richmond 23206), 804/649-8471, R. Michael Amyx, exec. sec.-treas.; Michael J. York, Harrisonburg, pres.; William Willis, Radford, vice pres.

WASHINGTON PUBLIC UTILITY DISTRICTS' ASSOCIATION, 1700 Tower Bldg., Seattle, Wash. 98101, 206/622-7441, James Boldt, exec. dir.; Harold W. Hill, Klickitat County PUD, pres.; Lois Powell, Grays Harbor County PUD, vice pres.; Francis Moore, Benton County PUD, sec.-treas.

EASTERN WASHINGTON PUD COMMISSIONERS' ASSOCIATION, 1700 Tower Bldg., Seattle, Wash. 98101, 206/622-7441, James Boldt, exec. dir.; Harold Beckemeier, Grant County PUD, Ephrata, pres.; Aubrey Hart, Kittitas County PUD, Ellensburg, vice-pres.; Ken Cochrane, Franklin County PUD, Pasco, sec.-treas.

WESTERN WASHINGTON PUD COMMISSIONERS' ASSOCIATION, 1700 Tower Bldg., Seattle, Wash. 98101, 206/622-7441, James Boldt, exec. dir.; Parker Knight, Skamania County PUD, Carson, pres.; Lois Powell, Grays Harbor PUD, Aberdeen, vice pres.: Jim Hubenthal, Lewis County PUD, Chehalis, sec.-treas.

MUNICIPAL ELECTRIC UTILITIES OF WISCONSIN, 421 N. Elizabeth, Jefferson, Wis. 53549, 414/674-3237, Robert R. Pawelski, Marshfield, pres.; James Austin, Menasha, first vice pres.; Charles J. Lenck, Fennimore, second vice pres.; Robert O. Stuhlmacher, Wisconsin Rapids, sec.-treas. ✸

JOINT ACTION AGENCIES

Alabama

ALABAMA MUNICIPAL ELECTRIC AUTHORITY Box 94, Opelika, Ala. 36801, 205/749-9094, Guy Thompson, Opelika, chmn.; 9 members: Alexander City, Dothan, Fairhope, Foley, Opelika, Piedmont, Sylacauga, Troy, Tuskegee. (estbl. 1981)

Arizona

ARIZONA POWER POOLING ASSOCIATION, Rt. 1, Box 69, Coolidge, Ariz. 85228; 602/723-3700; A.J. Faul, Coolidge, pres.; 3 members: Mesa, Electrical District No. 2 of Pinal County, Arizona Electric Power Cooperative.

California

CENTRAL CALIFORNIA POWER AGENCY, 6201 S. St., Sacramento, Cal. 95813; 916/452-3211; John L. Ravera, Sacramento, chmn.; 4 members: Sacramento, Modesto Irrigation District, Santa Clara, Redding. (estbl. 1981)

M-S-R PUBLIC POWER AGENCY, Box 4060, Modesto, Cal. 95352; 209/578-1212; Archer F. Pugh, Redding, chmn.; Charles S. Viss, Modesto Irrigation District, gen. mgr.; two geothermal properties leased, exploratory activity begun on one property; 3 members: Modesto Irrigation District, Santa Clara, Redding.

NORTHERN CALIFORNIA POWER AGENCY, 770 Kiely Blvd., Santa Clara, Cal. 95051; 916/722-7800; Fredrick F. Eyerly, Palo Alto, chmn.; Robert E. Grimshaw, gen. mgr.; 35 staff; 2,534,469,000 kWh sales; $40 million financing; 110-MW Shell 2 geothermal units; 12 members: Alameda, Biggs, Gridley, Healdsburg, Lodi, Lompoc, Palo Alto, Redding, Roseville, Santa Clara, Ukiah, Plumas-Sierra Cooperative. (estbl. 1968).

SOUTHERN CALIFORNIA PUBLIC POWER AUTHORITY, 613 Broadway, Glendale, Cal. 91205; 213/956-2045; Everett Ross, Riverside, pres.; Arthur T. Devine, exec. dir.; 5.91 percent (225 MW) of Palo Verde Nuclear Project, licensing and feasibility studies in progress for Mead-Phoenix direct current transmission line, interest in Harry Allen Power Plant; 11 members; Anaheim, Azusa, Banning, Burbank, Colton, Glendale, Imperial Irrigation District, Los Angeles, Pasadena, Riverside, Vernon. (estbl. 1980)

SOUTHERN CALIFORNIA UTILITY POWER POOL, c/o Los Angeles, Cal., Dept. of Water and Power, 111 N. Hope St., Room 1255, Box 111, 90051, 213/481-6003, Raymond C. Burt, Los Angeles, exec. cmmt. chmn.; projected: 7,017 MW (members' total capacity); 4 members: Burbank, Glendale, Los Angeles, Pasadena (estbl. 1982)

Colorado

ARKANSAS RIVER POWER AUTHORITY, 103 E. Elm, Box 70, Lamar, Colo. 81052; 303/336-3496; George N. Baker, Lamar, pres.; James M. Henderson, gen. mgr.; pur. 98,109, 025 kWh; rev. $2,437,602; projected: 80-120 MW coal plant; 6 members: Lamar, Walsenburg, La Junta, Las Animas, Trinidad, Colo., and Raton, N.M.

PLATTE RIVER POWER AUTHORITY, Timberline & Horsetooth Roads, Fort Collins, Colo. 80525, 303/226-4000; Albert J. Hamilton, gen. mgr.; current: 144,000 kW coal, gen. 989 million kWh, pur. 826 million kWh, rev. $47,703,704; 4 members: Estes Park, Fort Collins, Longmont, Loveland. (estbl. 1973)

Connecticut

CONNECTICUT MUNICIPAL ELECTRIC ENERGY COOPERATIVE, 268 Thomas Rd., Groton, Conn. 06340; 203/446-0620; Maurice R. Scully, exec. dir.; 17 staff; rev. $34,499,263; $43 million bonds issued; $30-40 million projected; life-of-unit contracts to 160-MW; 12-MW share of Millstone 3 nuclear unit; Hydro-Quebec intertie participant; 3 members: Groton, Norwich, Jewitt City. (estbl. 1976)

Delaware

DELAWARE MUNICIPAL ELECTRIC CORP., c/o City of Newark, Box 390, Newark, Del. 19711; 302/366-7070; Warren F. Beasly, New Castle, bd. chmn.; Albert K. Martin, Newark, pres.; 5 members: Clayton, Middletown, Newark, New Castle, Smyrna. (estbl. 1979)

Florida

FLORIDA MUNICIPAL POWER AGENCY, 7200 Lake Ellenor Drive, Suite 154, Orlando, Fla. 32809; 305/859-7310; Barbara Bidwell, New Smyrna Beach, chmn.; Calvin R. Henze, gen. mgr.; 5 staff; projected: 70-MW share in 802-MW St. Lucie No. 2 nuclear unit, 146-MW share in 405-MW Stanton coal unit; $11 million loans; 26 members: Alachua, Bartow, Blountstown, Bushnell, Clewiston, Fort Meade, Fort Pierce, Gainesville, Green Cove Springs, Homestead, Jacksonville Beach, Key West, Kissimmee, Lake Worth, Leesburg, Mount Dora, Newberry, New Smyrna Beach, Ocala, Quincy, St. Cloud, Sebring, Starke, Tallahassee, Wauchula, Vero Beach. (estbl. 1978)

Georgia

MUNICIPAL ELECTRIC AUTHORITY OF GEORGIA, 1470 Riveredge Pkwy., Atlanta, Ga. 30328; 404/952-5445; Gayle Manley, Albany, chmn.; Donald L. Stokley, gen. mgr.; 62 staff; current: 272 MW of 1,538-MW Hatch nuclear plant, 265 MW of 1,758-MW Wansley coal plant, purchase 2.4 billion kWh from Georgia Power Co.; 4.21 billion kWh sales; $1.3 billion financing; projected: 408 MW of 2,300-MW Vogtle nuclear plant, 162 MW of 1,616-MW Scherer coal plant; 47 members: Adel, Albany, Barnesville, Blakely, Brinson, Buford, Cairo, Calhoun, Camilla, Cartersville, College Park, Commerce, Covington, Crisp County, Doerun, Douglas, East Point, Elbertson, Ellaville, Fairburn, Fitzgerald, Forsyth, Fort Valley, Grantville, Griffin, Hogansville, Jackson, LaFayette, LaGrange, Lawrenceville, Mansfield, Marietta, Monroe, Monticello, Moultrie, Newnan, Norcross, Palmetto, Quitman, Sandersville, Sylvania, Sylvester, Thomaston, Thomasville, Washington, West Point, Whigham. (estbl. 1975)

Indiana

INDIANA MUNICIPAL POWER AGENCY, 5920 Castleway West Dr., Box 50700, Indianapolis, Ind. 46250; 317/849-3242; Frank Rudolph, bd. chmn.; Jesse Tilton, gen. mgr.; 25 percent (156 MW) participation in Gibson No. 5 unit; 26 members: Anderson, Bargersville, Centerville, Columbia City, Crawfordsville, Darlington, Flora, Frankfort, Frankton, Greenfield, Greendale, Jamestown, Lawrenceburg, Lebanon, Logansport, Middletown, Paoli, Pendleton, Peru, Rensselaer, Richmond, Rising Sun, Scottsburg, Tipton, Washington. (estbl. 1980)

Iowa

NORTH IOWA MUNICIPAL ELECTRIC COOPERATIVE ASSOCIATION, Box 445, Hwy. 169 and 5th Ave. N., Humboldt, Iowa 50548; 515/332-2981; Ronald L. Deiber, Alta, pres.; Richard A. Johnson, exec. vice pres.; coordination of members regarding purchase/sale of power, load forecasting, future supply sources, monthly power billings; 17 members: Algona, Alta, Bancroft, Cedar Falls, Coon Rapids, Forest City, Graettinger, Grundy Center, Laurens, Milford, New Hampton, Spencer, Sumner, Waverly, Webster City, West Bend, West Liberty. (estbl. 1965)

SOUTH IOWA MUNICIPAL ELECTRIC COOPERATIVE, 321 N. First St., Winterset, Iowa 50273; 515/462-2454, -2152; George C. Berry, Winterset, pres.; projected: purchase 50 MW of 650-MW Guthrie County (Iowa) coal unit; 17 members: Brooklyn, Cascade, Corning, Fontanelle, Gowrie, Greenfield, Indianola, Independence, Lamoni, La Porte, Lenox, Ogden, Preston, State Center, Stuart, Villisca, Winterset. (estbl. 1967)

MISSOURI BASIN MUNICIPAL ELECTRIC COOPERATIVE ASSOCIATION, 125 Central Ave., S.E., Orange City, Iowa 51041; 712/737-4885; Allen Roos, Orange City, pres.; Harold Schiebout, Sioux Center, vice pres.; Dean E. Meyer, Harley, sec.-treas.; owns 40 MW transmission capacity through Northwest Iowa Power Cooperative distribution system; 18

members: Alton, Denison, Fontanelle, Hartley, Hawarden, Kimballton, Lake Park, Manilla, Orange City, Paullina, Primghar, Remsen, Rock Rapids, Sanborn, Shelby, Sioux Center, Wall Lake, Woodbine. (estbl. 1978)

WESTERN IOWA MUNICIPAL ELECTRIC COOPERATIVE ASSOCIATION, 223 Main St., Manning, Iowa 51455; 712/653-3214; Orville Fink, Manning, pres.; Donald Krause, Hinton, vice pres.; 17 MW of Neal 4 coal-fired plant; 6 members: Anthon, Aurelia, Hinton, Manning, Mapleton, Onawa. (estbl. 1973)

Kansas

KANSAS MUNICIPAL ENERGY AGENCY (merged with Northwest Kansas Municipal Energy Agency), Box 1026, 1106 E. 27th, Suite 4, Hays, Kansas 67601; 913/628-6144; John Elder, Winfield, pres.; Gilbert E. Hanson Jr., gen. mgr.; 3 staff; interconnection of 5 members into the grid; $5.989 million financing; 33 members: Augusta, Baldwin City, Burlington, Chanute, Clay Center, Colby, Ellis, Erie, Fredonia, Garnett, Greensburg, Herington, Hill City, Hoisington, Iola, La Crosse, Larned, Lindsborg, Mulvane, Neodesha, Norton, Oakley, Oberlin, Osawatomie, Ottawa, Pratt, Sabetha, St. Francis, Sharon Springs, Sterling, Washington, Wellington, Winfield. (estbl. 1978)

Louisiana

LOUISIANA ENERGY AND POWER AUTHORITY, 804 St. John St., Lafayette, La. 70501; 318/269-4046; Mayor Edward ("Bubba") Lyons, Houma, chmn.; Sylvan Richard, mgr.; 3 staff; projected: 20 percent share in 530-MW coal-fired Rodemacher No. 2 unit, cogeneration with five industries in St. Gabriel's area, power supplier for members via purchase of members' power and sell-back of lowest-cost power; 10 members: Alexandria, Houma, Jonesville, New Roads, Winnfield, Morgan City, Lafayette, Plaquemine, Rayne. (estbl. 1980)

Maine

DIRIGO ELECTRIC COOPERATIVE, c/o Houlton Water Co., Box 726, Houlton, Maine 04730; 207/532-2259; Paul Coleman, pres.; 7 members: Houlton, Madison, Kennebunk, Eastern Maine Electric Cooperative, Swan Island Electric Cooperative, Fox Island Electric Cooperative, Union River Electric Cooperative. (Maine legislature has created state joint action agency; Dirigo may be terminated. (estbl. 1978)

Massachusetts

MASSACHUSETTS MUNICIPAL WHOLESALE ELECTRIC CO., Stony Brook Energy Center, Box 426, Ludlow, Mass. 01056; 413/589-0141; James E. Baker, Shrewsbury, chmn.; Phillip C. Otness, gen. mgr.; $987.87 million financing; Stony Brook 334-MW intermediate generating unit and 170-MW peaking unit; 33 members: Ashburnham, Belmont, Boylston, Braintree, Chicopee, Danvers, Georgetown, Groton, Hingham, Holden, Holyoke, Hudson, Hull, Ipswich, Littleton, Mansfield, Marblehead, Merrimac, Middleborough, Middleton, North Attleborough, Paxton, Peabody, Princeton, Reading, Rowley, Shrewsbury, South Hadley, Sterling, Templeton, Wakefield, West Boylston, Westfield. (estbl. 1976)

Michigan

MICHIGAN PUBLIC POWER AGENCY, 1922 S. Division, Suite 202, Grand Rapids, Mich. 49507; 616/245-8884; William P. Strom, Traverse City, chmn.; Richard I. Gorman, gen. mgr.; 2 staff; current: 38-MW share of 770-MW Campbell No. 3 coal unit; projected: 224-MW Belle River No. 1 coal unit; gen. 274 million kWh; pur. 14 million kWh; rev. $10,249,018; 18 members: Bay City, Charlevoix, Chelsea, Croswell, Grand Haven, Harbor Springs, Hart, Holland, Lansing, Lowell, Niles, Paw Paw, Petoskey, Portland, St. Louis, Sebewaing, Traverse City, Zeeland. (estbl. 1978)

MICHIGAN SOUTH CENTRAL POWER AGENCY, Box 62, 720 Herring Road, Litchfield, Mich. 49252; 517/542-2346; James R. Endicott, Coldwater, chmn. and commissioner; 7 staff; 55-MW coal plant; 5 members: Clinton, Coldwater, Hillsdale, Marshall, Union City. (estbl. 1979)

Minnesota

NORTHEASTERN MINNESOTA MUNICIPAL POWER AGENCY, Box 49, 19th St. and 6th Ave., Hibbing, Minn. 55746; 218/263-7515; Norman Schroder, Staples, chmn.; David C. Strafaecia, pres.; projected: surplus capacity agreement with Missouri Basin Municipal Power Agency; 12 members: Aitkin, Biwakik, Buhl, Ely, Gilbert, Grand Rapids, Hibbing, Keewatin, Mountain Iron, Nashwauk, Staples, Virginia.

NORTHERN MUNICIPAL POWER AGENCY, Box 528, Thief River Falls, Minn. 56701; 218/681-5816, -2943; John T. Anderson, Thief River Falls, pres.; 30 percent share of 414.6 MW Coyote lignite plant, full requirements power supplier for 12 cities; $268 million financing; 12 members: Bagley, Baudette, Fosston, Halstad, Hawley, Roseau, Stephen, Thief River Falls, Warren, Warroad, Minn.; Grafton, Park River, N.D.

SOUTHERN MINNESOTA MUNICIPAL POWER AGENCY, 21 First St. S.W., Suite 400, Rochester, Minn. 55901; 507/285-0478; David Martin, Owatonna, pres.; Pierre J. Heroux, exec. dir.; $17 million loan; current: 300-MW share in (800-MW) Sherco 3 plant, $61.8 million contract with Cooperative Power Association for interim power, $21 million contract for interim power with Dairyland Power Cooperative, share transmission agreement with Northern States Power Co. and Dairyland Power Cooperative; projected: transmission agreement with Interstate Power Co.; 16 members: Austin, Blooming Prairie, Fairmont, Lake City, New Prague, New Ulm, Owatonna, Preston, Redwood Falls, Rochester, Spring Valley, St. Peter, Truman, Waseca, Wells, Windom.

UNITED MINNESOTA MUNICIPAL POWER AGENCY, Box 521, 421 W. Third St., Litchfield, Minn. 55355; 612/693-3277; Dallas Nelson, Litchfield, pres.; current: 28-MW share in 800-MW Sherco 3 plant; 5 members: Grand Marais, Litchfield, Mora, North Branch, Princeton.

WESTERN MINNESOTA MUNICIPAL POWER AGENCY, 212 Second St. N.W., Ortonville, Minn. 56278; 612/839-2549; Russell F. Berg, Wadena, pres.; Russell Dau, gen. mgr.; staffed by Missouri Basin Municipal Power Agency; 114-MW share of 1,500-MW Missouri Basin Power Project; 19 members: Adrian, Alexandria, Barnesville, Benson, Detroit Lakes, Elbow Lake, Henning, Jackson, Lakefield, Lake Park, Luverne, Madison, Moorhead, Ortonville, St. James, Wadena, Westbrook, Windom, Worthington. (estbl. 1976)

Mississippi

MUNICIPAL ENERGY AGENCY OF MISSISSIPPI, c/o Greenwood Utilities, Box 866, Greenwood, Miss. 38930; 601/453-4761; Richard M. Webster Jr., Clarksdale, chmn.; 8 members: Canton, Clarksdale, Durant, Greenwood, Itta Bena, Kosciusko, Leland, Yazoo. (estbl. 1978)

Missouri

MISSOURI JOINT MUNICIPAL ELECTRIC UTILITY COMMISSION, Box 401, Jefferson City, Mo. 65102; 314/635-4526; Richard Malon, Columbia, chmn.; Wendell Locke, gen. mgr.; 28 members: Campbell, Cameron, Carthage, Chillicothe, Columbia, Fulton, Gallatin, Hannibal, Hermann, Higginsville, Kirkwood, Independence, Lamar, Macon, Marshall, New Madrid, Poplar Bluff, Richland, Rolla, Salisbury, Sikeston, Slater, Springfield, Trenton, Unionville, Vandalia, Waynesville, West Plains.

Nebraska

NEBRASKA MUNICIPAL POWER POOL, Box 95124, 1335 L St., Lincoln, Neb. 68509; 402/474-4759; Robert E. Arraj, Kimball, pres.; H. Steve Wacker, gen. mgr.; 18 staff; 20-MW share in Nebraska City No. 1 coal unit, 7-MW share in Laramie River Station coal unit; gen. 46,000 kW; 721,000 kWh; sales 365,688,000 kWh; rev. $9,521,677; 70 members: Alliance, Ansley, Arnold, Auburn, Bayard, Beatrice, Beaver City, Benkelman, Blue Hill, Bridgeport, Broken Bow, Burwell, Callaway, Cambridge, Central City, Chappell, Crete, Curtis, David City, Fairbury, Falls City, Franklin, Fremont, Gering, Grand Island, Grant, Hastings, Hebron, Hickman, Holdrege, Imperial Public Power District, Kimball, Lexington, Lincoln, Lodgepole, Lyman, Lyons, Mitchell, Morrill, Mullen, Nebraska City, Neligh, North Platte, Oxford, Pender, Plainview, Red Cloud, Sargent, Seward, Shickley, Sidney, South Sioux City, Stromsburg, Stuart, Superior, Sutton, Syracuse, Tecumseh, Valentine, Wahoo, West Point, Wilber, Wilcox, Wisner, Wood River, Neb.; Fleming, Haxtun, Holyoke, Wray, Yuma, Colo. (estbl. 1975)

MUNICIPAL ENERGY AGENCY OF NEBRASKA (Nebraska Municipal Power Pool is operating agent), Box 95124, 1335 L St., Lincoln, Neb. 68509; 402/474-4759; Glenn Beachler, Fairbury, chmn.; H. Steve Wacker, exec. dir. and sec.-treas.; 18 staff; current: 20-MW share of Nebraska City No. 1 coal unit, 7-MW share of Laramie River Coal Station; gen. 43,000 kWh (includes members' capacity used by MEAN); pur. 269,865,000 kWh; $10-25 million financing; projected: purchase power from Hastings Energy Center; 20 members: Alliance, Bayard, Beaver City, Blue Hill, Burwell, Chappell, Curtis, Fairbury, Gering, Kimball, Lyman, Mitchell, Morrill, Mullen, Oxford, Pender, Red Cloud, Stuart, Wahoo, West Point. (estbl. 1981)

North Carolina

NORTH CAROLINA MUNICIPAL POWER AGENCY NO. 1, Box 95162, 3117 Poplarwood Court, Raleigh, N.C. 27625; 919/876-9170; George Clay Jr., Shelby, chmn.; Ralph W. Shaw, gen. mgr.; $975 million financing; 75 percent (859-MW) share of Catawba Nuclear Station Unit 2, 37.5 percent of its support facilities; 20 members: Albemarle, Bostic, Cherryville, Concord, Cornelius, Drexel, Gastonia, Granite Falls, High Point, Huntersville, Landis, Lexington, Lincolnton, Maiden, Monroe, Morgantown, Newton, Pineville, Shelby, Statesville. (estbl. 1976)

NORTH CAROLINA EASTERN MUNICIPAL POWER AGENCY, Box 95162, 3117 Poplarwood Court, Raleigh, N.C. 27625; 919/876-9170; Simon C. Sitterson Jr., Kinston, chmn.; Ralph W. Shaw, gen. mgr.; $850 million financing; projected: undivided ownership interests, from 13 to 18 percent, in Brunswick Nuclear Station, Roxboro Plant, Mayo Plant, Shearon Harris Nuclear Plant; 34 members: Apex, Ayden, Belhaven, Benson, Clayton, Edenton, Elizabeth City, Enfield, Farmville, Fremont, Greenville, Hamilton, Hertford, Hobgood, Hookerton, Kinston, La Grange, Laurinburg, Louisburg, Lumberton, New Bern, Pikeville, Red Springs, Robersonville, Rocky Mount, Selma, Scotland Neck, Smithfield, Southport, Tarboro, Wake Forest, Washington, Waynesville, Wilson.

North Dakota

NORTH DAKOTA MUNICIPAL POWER AGENCY, Northwood, N.D. 58267; 701/343-6212; Truman Wold, Northwood, pres.; 6 members: Cavalier, Hillsboro, Hope, Lakota, Northwood, Valley City. (estbl. 1977)

Ohio

AMERICAN MUNICIPAL POWER-OHIO (AMP-OH), Box 21315, Columbus, Ohio 43221; 614/457-1274; Kenneth Hegemann, St. Marys, pres.; John W. Bentine, interim exec. mgr.; bulk power supplier for 40 members; 62 members are: Amherst, Arcadia, Beach City, Blanchester, Bloomdale, Bowling Green, Bradner, Brewster, Bryan, Celina, Cleveland, Columbiana, Columbus, Cuyahoga Falls, Cygnet, Deshler, Dover, Edgerton, Elmore, Galion, Genoa, Georgetown, Grafton, Hamilton, Hubbard, Hudson, Jackson, Jackson Center, Lebanon, Lodi, Lucas, Mendon, Milan, Minster, Monroeville, Montpelier, Napoleon, New Bremen, Newton Falls, Niles, Oak Harbor, Oberlin, Orrville, Pemberville, Pioneer, Piqua, Plymouth, Prospect, Seville, Shelby, South Vienna, St. Clairsville, St. Marys, Sycamore, Tipp City, Versailles, Wadsworth, Wapakoneta, Wellington, Westerville, Woodville, Yellow Springs. (estbl. 1972)

Oklahoma

OKLAHOMA MUNICIPAL POWER AUTHORITY, 201 N.E. 23rd, Oklahoma City, Okla. 73105; 405/528-7564; Buddy Veltema, Walters, chmn.; Harry Dawson, gen. mgr.; 37 members: Altus, Anadarko, Blackwell, Claremore, Comanche, Cushing, Duncan, Edmond, Eldorado, Fairview, Frederick, Granite, Hominy, Lexington, Lindsay, Mangum, Marlow, Newkirk, Okeene, Olustee, Pawhuska, Pawnee, Perry, Ponca City, Pond Creek, Prague, Pryor, Purcell, Ryan, Stillwater, Stroud, Tecumseh, Walters, Watonga, Waynoka, Wynnewood, Yale. (estbl. 1981)

South Carolina

PIEDMONT MUNICIPAL POWER AGENCY, Box 64, Gaffney, S.C. 29340; 803/489-8181; Jack E. Millwood, Gaffney, chmn.; H.F. Crater Jr., int. mgr. (803/487-7171); projected: 25 percent (369-MW) ownership in Catawba Nuclear Unit 2; 10 members: Abbeville, Clinton, Easley, Gaffney, Greer, Laurens, Newberry, Rock Hill, Union, Westminster. (estbl. 1979)

South Dakota

HEARTLAND CONSUMERS POWER DISTRICT, Box 248, Madison, S.D. 57052; 605/256-6536; Ellwood Paulsen, Centerville, pres.; Wendell J. Garwood, gen. mgr.; 8 staff; 195-MW share of 1,650-MW Laramie River Coal Station; 21 members: Arlington, Aurora, Colman, Estelline, Groton, Hecla, Howard, McLaughlin, Madison, Parker, Plankinton, South Dakota State University-Brookings, University of South Dakota-Vermillion, State Training School-Plankinton, Tyndall, Valga, Wessington Springs, White, S.D.; Akron, Iowa; Marshall, Tyler, Minn. (estbl. 1969)

MISSOURI BASIN MUNICIPAL POWER AGENCY 3005 W. Russell, Sioux Falls, S.D., 57107; 605/338-4042; Earl La Maack, Alexandria, pres.; Russell Dau, gen. mgr.; 31 staff; gen. 320,000 kW (260,000 kW coal, 60,000 kW oil-fired) gen. 321 million kWh; rev. $13,300,000; 52 members: Alton, Denson, Fontanelle, Hartley, Hawarden, Kimballton, Lake Park, Manilla, Orange City, Paullina, Primghar, Remsen, Rock Rapids, Sanborn, Shelby, Sioux Center, Wall Lake, Woodbine, Iowa; Adrian, Alexandria, Barnesville, Benson, Detroit Lakes, Elbow Lake, Henning, Jackson, Lake Park, Lakefield, Luverne, Madison, Moorhead, Ortonville, St. James, Wadena, Westbrook, Worthington, Minn.; Beresford, Big Stone City, Brookings, Burke, Faith, Flandreau, Fort Pierre, Pierre, Vermillion, Winner, Watertown, S.D.; Cavalier, Hillsboro, Lakota, Northwood, Valley City, N.D. (estbl. 1977)

SOUTH DAKOTA MUNICIPAL POWER AGENCY, 305 W. Russell, Sioux Falls, S.D. 57107; 605/224-7341; Dave Padgett, Pierre, pres.; issued bonds for Missouri Basin Municipal Power Agency office building; substation for Fort Pierre; 11 members: Beresford, Big Stone City, Brookings, Burke, Faith, Flandreau, Fort Pierre, Pierre, Vermillion, Watertown, Winner. (estbl. 1979)

Texas

SAM RAYBURN MUNICIPAL POWER AGENCY, 303 North Jackson, Livingston, Texas 77351; 713/327-5303; Wayne DuBose, Jasper, pres.; Robert D. Willis, exec. dir.; $157.25 million financing; projected: 108-MW share in 540-MW Nelson No. 6 coal unit (May 1982), 52-MW hydro project, option to participate in future Gulf States Co. projects; gen. 17,000 kW hydro; gen. 125,006,667 kWh (9 months); pur. 244,641,000 kWh (9 months); rev. $9,221,589; 4 members: Jasper, Liberty, Livingston, Texas, and Vinton, La. (estbl. 1979)

TEXAS MUNICIPAL POWER AGENCY, 600 Arlington Downs Tower, Arlington, Texas 76011; 817/461-4400; Ed Wagoner, gen. mgr.; 8 staff; projected: 6.2 percent share of 2,300-MW Comanche Peak nuclear units; 400-MW lignite-fired Gibbons Creek Steam Electric Station (1983), transmission facilities; 4 members: Bryan, Denton, Garland, Greenville.

Utah

INTERMOUNTAIN POWER AGENCY, 5250 S. 300 West, Suite 101, Murray, Utah 84107; 801/262-8807; Reece D. Nielsen, chmn.; Joseph C. Fackrell, exec. officer; current; transmission lines: two 500-kV direct current lines, 345-kV and 230-kV ac lines; projected: 3,000-MW coal-fired Intermountain Power Project (four units to be completed in 1986-89); 29 municipal members: Anaheim, Burbank, Glendale, Los Angeles, Pasadena, Riverside, Cal.; Beaver City, Bountiful, Enterprise, Ephraim, Fairview, Fillmore City, Heber, Holden, Hurricane, Hyrum, Kanosh, Kaysville, Lehi, Logan, Meadow, Monroe, Mount Pleasant, Murray, Oak City, Parowan, Price, Spring City, Utah. (Six cooperatives and one private utility are also participants in Intermountain Power Project) (estbl. 1977)

UTAH ASSOCIATED MUNICIPAL POWER SYSTEMS, 8722 South 300 West, Sandy, Utah 84091; 801/566-3933; W.B. Christensen, gen. mgr.; current: owns 14.6 percent of Hunter 2 coal-fired, steam generating plant; projected: purchase share of the Utah Power & Light Co. plant now held by Deseret G&T. (estbl. 1980)

Vermont

VERMONT PUBLIC POWER SUPPLY AUTHORITY, Box C-5515, South Burlington, Vt. 05401; 802/862-6323, -6388; Orman E. Croft, Swanton, chmn.; Harland G. Titemore, gen. mgr.; 8 staff; 11 members: Burlington, Enosburg Falls, Hardwick, Ludlow, Lyndonville, Morrisville, Northfield, Springfield, Stowe, Swanton, Washington Electric Cooperative. (estbl. 1979)

Washington

CENTRAL WASHINGTON POWER AGENCY, 1400 E. Vantage Hwy., Ellensburg, Wash. 98926; 509/925-3164; Floyd M. Weir, mgr.; 2 members: Grant County and Kittitas County Public Utility Districts. (estbl. 1962)

WASHINGTON PUBLIC POWER SUPPLY SYSTEM, Box 968, Richland, Wash. 99352-0968; 509/372-5000; Carl Halvorson, Portland, Ore., chmn.; Robert L. Ferguson, managing dir.; gen. 887,500 kW (860,000 kW nuclear, 27,000 kW hydro); projected: 2,340 MW nuclear from WPPSS projects 2 and 3; rev. $37,207,000; 23 members: cities of Ellenburg, Richland, Seattle, Tacoma, and public utility districts of following counties—Benton, Chelan, Clallam, Clark, Cowlitz, Douglas, Ferry, Franklin, Grant, Grays Harbor, Kittitas, Klickitat, Lewis, Mason, Okanogan, Pacific, Skamania, Snohomish, Wahkiakim. (Participants in the WPPSS nuclear plants include 32 municipalities, 26 PUDS, 52 cooperatives and 5 investor-owned utilities. (estbl. 1957)

Wisconsin

WESTERN WISCONSIN MUNICIPAL POWER GROUP, 860 Lincoln Ave., Fennimore, Wis. 53809; 608/822-6501; Charles J. Leuck, Fennimore, pres.; 10 members: Arcadia, Argyle, Cashton, Cumberland, Elroy, Fennimore, Merrillan, New Lisbon, Richland Center, Viola. (estbl. 1976)

WISCONSIN PUBLIC POWER INC., Box 44, Sun Prairie, Wis. 53590; 608/837-2653; Ernest J. Mullen, pres.; David W. Penn, gen. mgr.; 4 staff; gen. 395,764,360 kWh; pur. 2,475,176,517 kWh; 36 members: Algoma, Barron, Black River Falls, Boscobel, Brodhead, Cedarburg, Columbus, Cuba City, Deerfield, Elkhorn, Florence, Hartford, Jefferson, Kaukauna, Kiel, Lake Mills, Manitowoc, Marshfield, Medford, Menasha, Muscoda, New Holstein, New London, New Richmond, Oconomowoc, Plymouth, River Falls, Sturgeon Bay, Sun Prairie, Two Rivers, Waterloo, Waunakee, Waupun, Westby, Whitehall, Wisconsin Rapids.

Wyoming

WYOMING MUNICIPAL POWER AGENCY, Box 900, Lusk, Wyo. 82225; 307/334-2170; John Harrison, Pine Bluffs, chmn.; Larry LaMaack, exec. dir.; 4 staff; 16.5-MW share of 1,650-MW coal-fired Missouri Basin Power Project, purchases power from Western Area Power Administration, transmission services from WAPA; gen. 30.7 million kWh; pur. 69.4 million kWh; rev. $3,048,327; 7 members: Cody, Fort Laramie, Guernsey, Lingle, Lusk, Pine Bluffs, Wheatland. ✳

CABLE COMMUNICATION SYSTEMS

Publicly owned cable communication systems in cities or towns served by local publicly owned electric utilities are underlined. When two numbers are listed under "Channels" the first is the number in use and the second is the number available.

Cable System by State	*Person in charge Phone*	*Year Started*	*Subscribers*	*Channels*	*Basic Monthly Rate*	*Utility Use*	*Structure*	*Financing*
ALABAMA								
Riviera Utilities 413 East Laurel Ave. Box 550 Foley 36536	H. Sewell St. John Jr. 205/943-5001	1982	776	16-36	$10.50	No	Separate function of utilities board	Retained earnings of utilities board
Lincoln Cable TV Box 172 Lincoln 35096	C.O. Watson 205/763-7777	1983	550	12	10.00	No	Separate department	City loan
Opp Cablevision Box 311 Opp 36467	Charles McGowan 205/493-4571	1967	2,500	10	6.00	No	Under utility department	City operating revenues
ARKANSAS								
Conway Corporation Box 99 Conway 72032	James H. Brewer 501/329-5641	1980	4,740	19	7.50	No	Owned by city and leased to municipal Conway Corp.	Loan from utility department

Cable System by State	*Person in charge Phone*	*Year Started*	*Subscribers*	*Channels*	*Basic Monthly Rate*	*Utility Use*	*Structure*	*Financing*
CALIFORNIA								
San Bruno Municipal Cable TV 567 El Camino Real San Bruno 94066	David A. Thomas 415/877-8889	1971	8,000	22-26	7.25	No	Separate department	
COLORADO								
Copper Mountain Metropolitan District Cable TV Box 3195 Copper Mountain 80443	Ray Bishop 303/968-2882 ext. 6440	1977	700	6	13.00	No (investigating)	Metropolitan District (similar to city government)	General obligation bonds
FLORIDA								
City of Newberry City Hall Newberry 32669	Layne Rooks 904/472-2161	1974	600	8	6.00	No	Part of utility department	Utility's general fund
Valparaiso Communications System Box 296 44 Southview Ave. Valparaiso 32580	Thomas Miller 904/678-2922	1976	1,217	20	6.00			
GEORGIA								
City of Covington CATV Covington 30209	Frank Turner 404/786-5324	1980	2,000	18-35	6.00	Air-conditioning load management planned	Separate cable department	City's general fund
City of Monroe Box 725 Monroe 30655	John T. Briscoe Jr. 404/267-5756	1972	2,789	19-21	4.00	Air-conditioning load management	Under utility department	Utility's general fund and local bank
ILLINOIS								
City of Madison Box 87 Madison 62060	Mike Macek 618/877-4854	1982	1,000 (est.)	No TV		Burglary, fire and emergency services	Separate alarm and cable department	City's general fund
IOWA								
Coon Rapids Cable System 123 Third Avenue Box 207 Coon Rapids 50058	Eugene P. Smith 712/684-2225	1982	300	15-35	9.50	Will use next year	Operated by utility; separate board for policy	Utility reserve funds
Hartly Municipal Cable System 169 South Central Ave. Hartly 51346	Dean Meyer 712/728-2240	1983	425	17	9.00	Maybe load management	Separate department	Loan from surplus electric funds
Manning Municipal Cable Board 719 Third St. Manning 51455	Gerald Beck 712/653-3214	1982	375	20	9.50	Load management in 1983.	Operated by separate board	Electric revenue bonds for load management; gas department surplus for the rest
Primghar Municipal Cable TV 741 16th St. Primghar 51245	Robert Mulder 712/757-2435	1981	275	21-36	8.50	No	Part of utility department	General obligation bonds
Community Cable Television Corporation City of Sanborn Sanborn 51248	Allen Bonderman 712/729-3974	1981	320	21-36	8.50	Load management/ air conditioners and water heaters	Corporation controlled by city	Utility funds and corporation revenue bonds
KANSAS								
Americus City CATV Americus 66835	Mike Wooderson 316/884-5655	1976	252	9	12.00	No	Separate cable department	Revenue bonds
Arma Cablevision City of Arma Box 829 Arma 66712	Mavis Masterson 316/347-4125	1981	378	13-14	7.50	No	Separate cable department	Cable revenue bonds
Baxter Cable Vision City of Baxter Springs Baxter Springs 66713	Don Henry 316/856-3600	1980	1,000	11	8.50	No (weather alert)	City-owned	Industrial revenue bonds

Cable System by State	*Person in charge* *Phone*	*Year Started*	*Subscribers*	*Channels*	*Basic Monthly Rate*	*Utility Use*	*Structure*	*Financing*
City of Cawker City Box 2 Cawker City 07430	Delbert Wallace 913/781-4713	1977	220	6	8.00	No	Separate department	General obligation bonds
Columbus Cablevision 300 East Maple Columbus 66725	Gail Houser 316/429-2159	1980	648	11	8.00	Emergency disaster warning	Separate city department	Revenue bonds
Marion Municipal Cable Vision City of Marion Marion 66601	Joan Bowers 316/382-3703	1978	400	12	10.50	No	Separate department	General obligation bonds
City of Pawnee Rock Cable Television Utility Box 218 Pawnee Rock 67567	LaWanda Hendricks 316/982-4386	1983	125 (est.)	8	20.00	No	Separate city utility department	Cable revenue bonds
City of Waverly Box 308 Waverly 66871	Diane Phillips 913/733-2461	1977	150	9	12.50	No	Separate city department	General obligation bonds
KENTUCKY								
Community Service, Incorporated 325 Ann St. Frankfort 40601	Ben Fowler 502/227-7513	1952	8,400	16	3.50	No	Nonprofit corporation	City loan
MASSACHUSETTS								
Shrewsbury's Electric Light Plant 100 Maple Ave. Shrewsbury 01545	James E. Baker 617/845-4881	Voters approved in 1982	6,500 (est.)	80	6.95	Energy management	Franchise awarded Electric Light Plant to construct and operate	General obligation bonds
MICHIGAN								
City of Crystal Falls 401 Superior Ave. Crystal Falls 49920	Walter E. Hagglund 906/875-6650	1959	800	10-21	4.50	No	Part of utility	Loan from city's general fund
City of Norway CATV Box 194 Norway 49870	Junior Stanchina 906/563-9641	1954	1,465	11	4.00	No	Part of utility	Utility general fund
Wyandotte Municipal Service 3005 Viddle Ave. Wyandotte 48192	Dale Simmons 313/282-7100 ext. 364	1982	6,000	52	8.00	Future use planned	Separate department within utility	Lease system from private investors with purchase agreement at a fixed date
MINNESOTA								
Bagley City Cable TV Box M Bagley 56621	Bernie Stavig 21[illegible]/[illegible]94-2300	1976	506	11	7.65	No	Within utility department	Cable revenue bonds
City of Fosston Cable TV 220 First St., N.E. Fosston 56542	Russell Earls 218/435-1737	1976	550	12	6.75	Load management	Under utility	Cable revenue bonds
Jackson Municipal TV System 504 Second St. Jackson 56143	Kevin Murray 507/847-3225	1957	1,200	10-12	5.00			
MISSOURI								
Newburg Cable TV System Newburg 65550	Barbara Macormic 314/762-2315	1969	260	6	5.00	No	Operated through city hall	Borrowed from private development corporation
Unionville Cable Authority 1621 Grant St. Box 206 Unionville 63565	Larry C. Weston 816/947-3316	1980	734	11	8.25	No	Separate nonprofit board	Cable revenue bonds
OREGON								
Cascade Locks CATV Box 308 Cascade Locks 97014	Ken Hobson 503/374-8484	1972	366	10-23	6.75	No	Separate department administered by council	Cable revenue bonds
Town of Lexington Lexington 97839	Mayor Ed Baker 503/989-8116	1959	100	8	5.00			
PENNSYLVANIA								
New Wilmington Borough Cable TV 140 West Neshannock Ave. New Wilmington 16142	Ed Garrett 412/946-8167	1979	300	12	6.00	No	Separate department	General city fund

Cable System by State	*Person in charge Phone*	*Year Started*	*Subscribers*	*Channels*	*Basic Monthly Rate*	*Utility Use*	*Structure*	*Financing*
Pitcairn Community Antenna System 582 Sixth St. Pitcairn 15140	George Myers 412/372-6500	1953	1,000	10-35	3.00	No	Under light department	Installation fees of original subscribers
Rouseville Television Club Rouseville 16344	Charles Licht 814/676-2171	1957	275	8	3.00			
SOUTH DAKOTA								
City of Beresford 101 North Third St. Beresford 57004	Terry L. Peters 605/763-5501	1982		12				
WASHINGTON								
City of Sumas TV Cable System Box 5, Cherry St. Sumas 98295	Lawrence Silvis 206/988-5711	1953	264	7	4.50	No		
WISCONSIN								
City of Oconto Falls 104 South Franklin St. Box 70 Oconto Falls 54154	George Barber 414/846-2911	1981	Now 450; plan 600	20-52	7.95	Maybe meter reading	Under utility commission	Bank loan backed by city ✷

FEDERAL POWER AGENCIES

DEPARTMENT OF ENERGY, Washington, D.C. 20585, 202/252-5000
Secretary—Donald P. Hodel, 252-6210
Deputy secretary—W. Kenneth Davis, 252-5500
Acting under secretary and assistant secretary, fossil energy—Jan W. Mares, 252-6660
General counsel—R. Tenney Johnson, 252-5281
Assistant secretary, management and administration—Martha Hesse, 252-5940
Assistant secretary, congressional, intergovernmental and public affairs—Robert C. Odle Jr., 252-5450
Assistant secretary, international affairs—George Bradley (acting) 252-5858
Assistant secretary, nuclear energy—Shelby T. Brewer, 252-6450
Assistant secretary, conservation and renewable energy—Joseph J. Tribble, 252-9220
Assistant secretary, defense programs—Herman E. Roser, 252-2177
Assistant secretary, environmental protection, safety and emergency preparedness—William A. Vaughan, 252-4700
Inspector general—James R. Richards, 252-4393
Director, office of state and local assistant programs—Melvin Chiogioji, 252-9240
Controller—P. Marshall Ryan, 252-4171

Created under Public Law 95-91, signed by President Carter on Aug. 4, 1977, the Department of Energy (DOE) was activated on Oct. 1, 1977. The department includes federal power marketing agencies formerly in the Department of the Interior (see listings below); the former Federal Power Commission, renamed the Federal Energy Regulatory Commission (see listing below); all functions of the former Federal Energy Administration and Energy Research and Development Administration; and a variety of other functions transferred from several other federal departments and agencies.

ECONOMIC REGULATORY ADMINISTRATION, DOE, Washington, D.C. 20461, 202/633-9733. Administrator, Rayburn Hanzlik; acting deputy administrator, Paul Michael; special counsel, Milton Lorenz; solicitor, Carl Corrallo; director, Office of Fuels Programs, James Workman

The Economic Regulatory Administration (ERA) is the entity within the Department of Energy responsible for administering and enforcing most of the department's regulatory programs.

ENERGY INFORMATION ADMINISTRATION, DOE, Washington, D.C., Forrestal Building 20585, 202/252-6411. Administrator, J. Erich Evered; deputy administrator, Albert H. Linden Jr., 202/252-6351; executive assistant, Lawrence Klur, 202/252-6358; director, National Energy Information Center, John E. Daniels, 252-8800 or 252-2363.

In establishing the Energy Information Administration (EIA) in 1977, Congress gave the agency the responsibility for ". . . carrying out a central, comprehensive and unified energy data and information program which will collect, evaluate, assemble, analyze and disseminate data and information which is relevant to energy resource reserves, energy production, demand and technology, and related economic and statistical information; or which is relevant to the adequacy of energy resources to meet demand in the near and long-term future for the nation's economic and social needs."

FEDERAL ENERGY REGULATORY COMMISSION, 825 N. Capitol Street, N.E., Washington, D.C. 20426, 202/357-8200. Commissioners (all terms expire Oct. 28 of year listed): C. M. Butler III–Chairman (1983); Georgiana Sheldon (1984); John David Hughes (1983); Anthony Souza (1984); Oliver G. Richard III (1985); secretary, Kenneth F. Plumb; executive director, William G. McDonald; director, office of congressional, intergovernmental and public affairs, Charles A. McManus Jr.; director, office of electric power regulation, Larry Anderson; director, office of pipeline and producer regulation, Kenneth Williams; director, division of public information, Rachelle Patterson; director, division of congressional affairs, Pamela Simpson; director, division of intergovernmental affairs, Joan Simmons; chief, public reference branch, Natina M. Brown.

ALASKA POWER ADMINISTRATION, Box 50, Juneau, Alaska 99802, 907/586-7405. Administrator, Robert J. Cross.

Alaska Power Administration (APA) was established in 1967 to operate and market power from federal hydroelectric projects in Alaska including the 30,000-kW Eklutna Project constructed by the Bureau of Reclamation and the 47,160-kW Snettisham Project under terms of an agreement between the Department of the Interior and the Army Corps of Engineers. In fiscal 1982, APA sold 313 million kWh and had power revenues of $4.3 million.

BONNEVILLE POWER ADMINISTRATION, Box 3621, 1002 N.E. Holladay St., Portland, Ore. 97208, 503/230-3000. Administrator, Peter T. Johnson; deputy administrator, Earl Gjelde; executive assistant administrator, James J. Jura; assistant administrator for power management, Edward Sienkiewicz; assistant administrator, manager of Washington, D.C., office, Larry C. Larson, Federal Bldg., Room 5317, 12th and Pennsylvania Ave., N.W., Washington, D.C. 20461, 202/633-8330.

Bonneville Power Administration (BPA), established under the Bonneville Project Act of 1937, markets power from projects constructed by the Army Corps of Engineers and the Bureau of Reclamation in the Columbia River Basin. As of Dec. 31, 1981, the Federal Columbia River Power System included 30 hydroelectric projects with 18,792,780 kW of installed capacity. During the calendar year, BPA sold 82.2 billion kWh of electricity for $718 million to 116 publicly owned and cooperative systems, 8 private power companies, 16 industries and 6 federal and state agencies in the Pacific Northwest and to 15 agencies and companies outside the Northwest.

SOUTHEASTERN POWER ADMINISTRATION, Samuel Elbert Bldg., Elberton, Ga. 30635, 404/283-3261. Administrator, Harry C. Geisinger; gen. counsel, Curtis H. Bell; chief, division of power sales, Kenelm E. Rucker.

Southeastern Power Administration (SEPA) was established in 1950 to market power from the Army Corps of Engineers projects in 10 southeastern states. In fiscal year 1982 SEPA sold 6.9 billion kWh from 21 projects with a total installed capacity of 2,712,375 kW and had revenues of $60.9 million.

SOUTHWESTERN POWER ADMINISTRATION, Box 1619, Page Belcher Federal Bldg., 333 W. Fourth, Tulsa, Okla. 74101, 918/581-7474. Administrator, Richard B. Risk Jr.; deputy administrator, Warren L. Jamison; chief, power marketing division, Walter M. Bowers; chief, power facilities, James N. McClanahan; chief, administrative management division, Francis R. Gajan; public affairs officer, Bradley C. Byers.

Southwestern Power Administration (SWPA) was established in 1943 to market power in Kansas, Missouri, Oklahoma, Arkansas, Texas and Louisiana from Army Corps of Engineers projects in Arkansas, Missouri, Oklahoma and Texas. In fiscal year 1982 SWPA sold approximately 4.4 billion kWh of electricity from projects with a total installed capacity of 1,983,134 kW and had gross revenues of approximately $66.5 million.

WESTERN AREA POWER ADMINISTRATION (incorporating federal power marketing and transmission functions which were transferred from the Bureau of Reclamation), Box 3402, Golden, Colo. 80401, 303/231 + ext. Administrator, Robert L. McPhail (1511); deputy administrator, William H. Clagett (1513); assistant administrator for management services, Don W. Shinkle (1517); assistant administrator for engineering, Thomas L. Weaver (1516); assistant administrator for power management, operations and maintenance, Joe D. Hall (1518); general counsel, Thomas A. Hine (1534); public affairs officer, Robert M. Zeeck (1554).

The service area of the Western Area Power Administration (Western or WAPA) extends into 15 western states and includes about 15,800 miles of transmission lines and approximately 7,708 MW of capacity at 47 hydro projects constructed by the Corps of Engineers and the Bureau of Reclamation. Additionally, Western markets the U.S. entitlement from the Navajo coal-fired plant near Page, Ariz. This brings the total installed generating capacity to 8,255 MW. During fiscal year 1981 power sales were about 36.7 billion kWh and power revenues were $335.8 million.

TENNESSEE VALLEY AUTHORITY, Knoxville, Tennessee 37902, 615/632-2101. Directors (9-year terms expire May 18): Charles H. Dean Jr., Chairman (1990); S. David Freeman (1984); Richard M. Freeman (1987). General manager, William F. Willis; general counsel, Herbert S. Sanger Jr.; manager of power, Hugh G. Parris, Chattanooga, Tenn. 37401, 615/751-2823.

The Tennessee Valley Authority (TVA) is a corporate agency of the federal government created by Congress in 1933 as a regional resource development agency. As of Sept. 30, 1982, the authority had a total installed capacity of 30,886,930 kW (coal-fired, 17,647,360 kW; nuclear 5,897,160 kW; hydro, 4,832,410 kW; combustion turbine, 2,510,000 kW) and also marketed the output of eight federal dams constructed by the Corps of Engineers on the Cumberland River (853,000 kW) and 12 dams of the Aluminum Company of America (423,715 kW) for a total system capacity of 32,163,645 kW.

Almost 70 percent of TVA power sales of 109 billion kWh in fiscal 1982 were made at wholesale to 110 municipal utilities and 50 rural electric cooperatives serving 2.9 million consumers in Tennessee, northern Alabama, northern and eastern Mississippi, southern Kentucky, and smaller areas in northern Georgia, western North Carolina, and southwestern Virginia. TVA also sold 15.6 billion kWh to private industries, 16.7 billion kWh to other federal agencies, and 351 million kWh to private power companies.

U.S. ARMY CORPS OF ENGINEERS, Pulaski Building, Washington, D.C. 20314, 202/272-0005. Chief of Engineers, Lt. Gen. J. K. Bratton; deputy chief of engineers, Maj. Gen. E. R. Heiberg III; acting director of civil works, Brig. Gen. Forrest T. Gay III; exec. dir., civil works, Col. P. Kavanaugh.

At the end of calendar year 1982 the U.S. Army Corps of Engineers had constructed and was operating 68 hydroelectric projects with a total installed capacity of 19.3 million kW. Power from corps projects is marketed by agencies of the Department of Energy.

RURAL ELECTRIFICATION ADMINISTRATION, South Bldg., U.S. Dept. of Agriculture, Washington, D.C. 20250, 202/382-9540. Administrator, Harold V. Hunter; deputy administrator, Jack Van Mark; assistant administrator-electric, Joseph S. Zoller.

The Rural Electrification Administration (REA), established under executive order by President Franklin D. Roosevelt in 1935 and subsequently authorized by the Rural Electrification Act of 1936, makes loans and loan guarantees to provide electric and telephone service to rural areas.

	Fiscal Year 1982	*Cumulative*
Insured Loans: 2 percent	*$77,846,000*	*$9,867,883,595*
5 percent	*772,154,000*	*6,498,905,000*
Total Insured	*850,000,000*	*16,366,788,595*
Electric loans guaranteed by REA:	*5,064,594,000*	*30,803,239,470*
Total:	*5,914,594,000*	*47,170,028,065*

NUCLEAR REGULATORY COMMISSION, 1717 H St. N.W., Washington, D.C. 20555, 202/634-1481. Commissioners (five-year terms expire June 30); Nunzio Palladino, chairman (1985); Thomas M. Roberts (1985); Victor Gilinsky (1984); John F. Ahearne (1983); James K. Asselstine (1987).

The Nuclear Regulatory Commission (NRC) licenses and regulates the use of nuclear energy by licensing persons and companies to build and operate nuclear reactors and to own and use nuclear materials. NRC makes rules and sets forth standards for licenses and inspects activities of licensees. ✳

MAJOR CANADIAN ELECTRIC UTILITIES

by I. MURRAY PHILLIPS

manager, administrative services, Canadian Electrical Association

THIRTY-THREE ELECTRIC UTILITIES in Canada, represented by the Canadian Electrical Association (CEA), are directly responsible for generating more than 95 percent of the nation's electric energy. The bulk of the remaining power is generated by large industrial power users who maintain their own facilities.

Most electric utilities are responsible for generation, transmission and distribution to the ultimate customer. In several cases, major generating utilities sell in bulk to municipally owned utilities. With the exception of Ontario, where 324 municipally owned utilities buy power direct from the generating and transmitting authority (Ontario Hydro), most of the major municipal utilities elsewhere in Canada also are members of CEA.

Unlike in the United States, privately owned power companies in Canada are in the distinct minority. Most utilities are owned directly and completely by their provincial governments.

Power generation in Canada in 1981 was 69.7 percent hydro, 19.8 percent conventional thermal, 9.5 percent Canadian Deuterium Uranium (CANDU) nuclear, 0.2 percent internal combustion and 0.5 percent gas turbine. Power exports to the United States in 1981 totalled 35,346 Gigawatt-hours (GWh) (up from 30,174 GWh in 1980) compared to 1,497 GWh imported (down from 2,940 GWh in 1980). This net export of 33,849 GWh (up from 27,234 GWh in 1980) represented 9.8 percent of net Canadian electricity generation as compared with 7.4 percent in 1980. Surplus generating capacity in Canada in 1982 indicates there is room for increased electricity exports to the United States.

The following is a brief outline of the major electric utilities in Canada by province:

British Columbia

British Columbia Hydro & Power Authority is the largest electric utility in British Columbia. It is owned entirely by the provincial government and supplies the entire province. Total installed generating capacity is 8,837 MW of which 7,491 MW are hydroelectric. B.C. Hydro has 6,009 employees.

West Kootenay Power is a small private utility dedicated principally to supplying power to a large private smelter operation in the interior of British Columbia. It also supplies power to the city of Trail. Generating capacity is 42 MW, all hydroelectric.

Alberta

Alberta is the only province in Canada that has not nationalized the power companies. This is the home of Canada's two largest private power companies.

TransAlta Utilities Corp., formerly Calgary Power Ltd., is the largest private or investor-owned electric utility in Canada, with an installed generating capacity of 3,349 MW, 2,549 MW of which is coal-fired power with most of the balance, 800 MW, being hydro. Some 253,000 customers are served directly by TransAlta. That figure does not include the 204,083 customers served by the City of Calgary municipal utility which buys all of its power requirements in bulk from TransAlta.

Alberta Power, the second largest privately owned electric utility in Canada, is located in Edmonton, Alberta, and serves 128,820 customers directly aside from some bulk power sales to Edmonton Power, the city-owned electric utility. Installed generating capacity is 668 MW, of which 516 MW is coal-fired. Municipally owned Edmonton Power has installed generating capacity of 1,050 MW, all of it gas-fired.

Alberta Power is owned by Canadian Utilities which also owns and operates Yukon Electric in the Northwest Territories, and several gas utilities.

Saskatchewan

Saskatchewan Power Corp. serves all of the province's 357,249 customers. It is owned entirely by the provincial government. Of 2,164 MW of installed generating capacity, 1,574 MW are steam, 123 MW are derived from internal combustion and the balance, 467 MW, from hydro.

Manitoba

Manitoba Hydro, owned by the provincial government, is the largest of two electric utilities in the province. Of a total installed capacity of 3,926 MW, 3,504 MW are produced from hydro. Manitoba Hydro serves the entire province directly with the exception of its largest city, Winnipeg, which is served by the municipal utility.

Winnipeg Hydro is a municipally owned utility serving 111,376 customers within the city. Installed generating capacity consists of 140 MW of hydro and 50 MW of coal-fired thermal power.

Ontario

Ontario Hydro is the largest electric utility in Canada. Owned by the provincial government, its mandate is to meet generation and transmission requirements within the province. Distribution to ultimate customers is handled by 324 municipal utilities which buy bulk power from Ontario Hydro. Seven hundred and sixty thousand retail customers in rural areas are served directly. In-service dependable capacity is 22,600 MW. Total generation in 1981 was 104,298 GWh of which 35,135 GWh was hydro, 32,164 GWh was conventional thermal, 36,891 GWh was nuclear and 108 GWh was oil.

Quebec

Hydro-Quebec is the second largest utility in Canada. It is owned by the provincial government and 15,819 MW of its total capacity of 16,862 MW are derived from hydro.

The balance of Hydro-Quebec's rated capacity, 1,043 MW, is all peaking power of which 600 MW is internal combustion, 363 MW is gas turbine, and 80 MW is diesel. The 635-MW Gentilly II CANDU nuclear station will be added to Hydro-Québec's generating capacity in the near future.

New Brunswick

New Brunswick Electric Power Commission is wholly owned by the provincial government of New Brunswick. It is responsible for all generation, transmission, and distribution of electrical energy within the province and employs 2,686 people. As of Dec. 31, 1980, it had a total rated operating capacity of 2,537 MW, composed mostly of oil-fired, thermal generation. The thermal system includes 1,686 MW of conventional thermal generation and 29 MW of gas turbine and diesel. Hydro provided 812 MW.

New Brunswick Power was the third utility in Canada to add nuclear power to its capacity. The 630-MW (CANDU) nuclear reactor at its Point Lepreau Station was started up in mid-1982.

Nova Scotia

The Nova Scotia Power Corp. is also a provincially owned utility. Its total generation of 1,890 MW includes 631 MW coal, 746 MW oil, 169 MW gas and 355 MW hydro; 0.3 MW of wind generation are connected to the system and a tidal plant, at Annapolis, Nova Scotia, will add 20 MW of tidal power in 1983. Aside from several small municipal utilities responsible for distribution within their own service area, Nova Scotia Power Corp. is the sole generating, transmitting, and distributing utility in the province.

Prince Edward Island

Maritime Electric Co. Ltd. is a small, privately owned utility serving Canada's smallest province. Maritime Electric's total generating capacity includes 71 MW of oil-fired generation and 39 MW of gas turbine generation. They are interconnected to New Brunswick through a submarine cable across the strait. Maritime Electric is a wholly owned subsidiary of Montreal Engineering Co.

Newfoundland

The province of Newfoundland is served by a combination of public and private utilities. The largest utility in the province, responsible for generation primarily and some distribution in remote areas, is Newfoundland and Labrador Hydro. It is owned by the government of the province of Newfoundland. Newfoundland and Labrador Hydro also owns Churchill Falls Labrador Corp., Twin Falls Power Corp., Gull Island Power Corp. and the Lower Churchill Development Corp. Including all its subsidiaries, Newfoundland and Labrador Hydro has a total of 6,407 MW of which 5,923 MW is derived from hydro (5,225 MW of which are produced by Churchill Falls Labrador Corp.) with 450 MW of oil-fired generation and 34 MW of internal combustion. Legal and technical discussions are still being held regarding the development of some sites on the Lower Churchill River in Labrador.

Aside from serving large industrial customers in some areas, and individual customers in remote areas, the bulk of Newfoundland and Labrador Hydro's generation is sold to Newfoundland Light & Power Corp., a private utility responsible for distribution to most of the island's individual customers. Newfoundland Light & Power Corp. also has some of its own generation, including 30 MW of oil-fired generation, 45 MW gas turbine generation, 14 MW of internal combustion generation and 82 MW of hydro generation.

Those are the principal utilities within Canada. Following are their addresses, phone numbers and chief operating or executive officers:

British Columbia Hydro and Power Authority, 970 Burrard St., Vancouver, British Columbia V6Z 1Y3, 604/663-2212, R. W. Bonner, chairman; J. N. Olsen, president and chief operating officer.

Alberta Power Ltd., 10040 - 104th St., Edmonton, Alberta T5J 2V6, 403/420-7310, E. W. King, president and chief executive officer.

TransAlta Utilities Corp., Box 1900, 110 - 12th St. S.W., Calgary, Alberta T2P 2M1, 403/267-7110, M. M. Williams, president and chief executive officer.

Saskatchewan Power Corp., 2025 Victoria Ave., Regina, Saskatchewan S4P 0S1, 306/527-7611, E. B. Campbell, acting president.

Manitoba Hydro, Box 815, 820 Taylor Ave., Winnipeg, Manitoba R3C 2P4, 204/474-3311, L. Blachford, president.

Ontario Hydro, 700 University Ave., Toronto, Ontario M5G 1X6, 416/592-5111, M. Nastich, president.

Hydro-Québec, 75 ouest, boul. Dorchester, Montréal, Québec H2Z1A4, 514/289-2211 Joseph Bourbeau, président de conseil; Guy Coulombe, président et directeur général.

New Brunswick Electric Power Commission, 527 King St., Fredericton, New Brunswick E3B 4X1, 506/453-4444, A. J. O'Connor, general manager.

Nova Scotia Power Corp., Box 910, Barrington Tower, Scotia Square, Halifax, Nova Scotia B3J 2W5, 902/424-6230, G. D. Mader, senior vice-president.

Maritime Electric Co. Ltd., Box 1328, Charlottetown, Prince Edward Island C1A 7N2, 902/892-6531, J. H. Reynolds, vice-president and general manager.

Newfoundland Light & Power Co. Ltd., Box 8910, Kenmount Road, St. John's, Newfoundland A1B 3P6, 709/737-5600, D. S. Templeton, president and general manager.

Newfoundland and Labrador Hydro, Box 9100, Philip Place, Elizabeth Square, St. John's, Newfoundland A1A 2X8, 709/737-1400, V. L. Young, chairman and chief executive officer.

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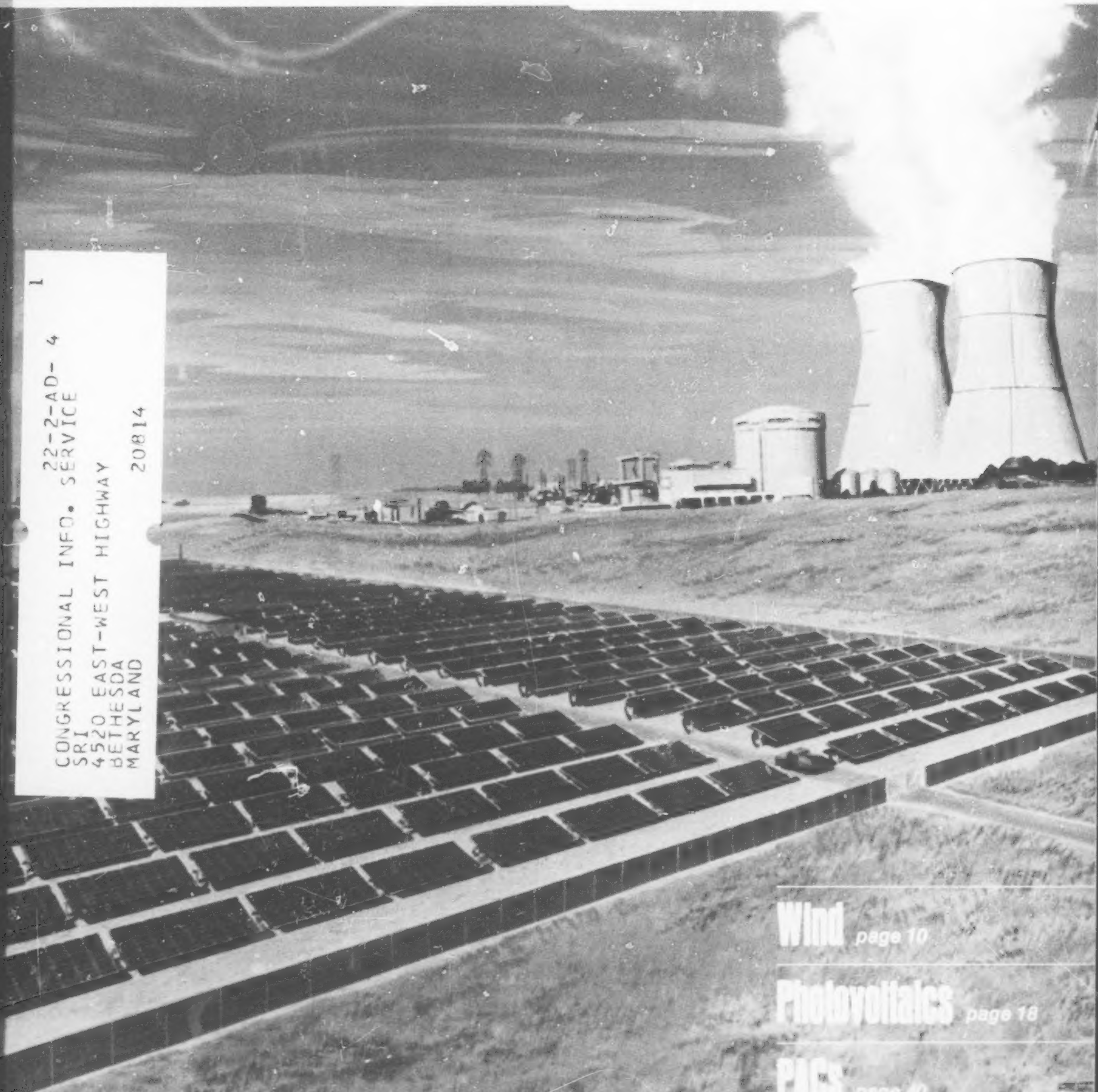

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FRONT COVER: Sacramento (Cal.) Municipal Utilities District (SMUD) has begun constructing the first megawatt of its photovoltaic system (shown in this drawing). SMUD plans a 100-MW PV system adjacent to its Rancho Seco nuclear plant. Other municipals are also developing photovoltaics, as reported by Steven J. Strong in his article beginning on page 18.

Photo courtesy Acurex Solar Corp.

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Associate editor, JEANNE WICKLINE LABELLA
Assistant editor, LORI A. WOEHRLE
Engineering editor, HERBERT I. BLINDER
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than any Congress before it." Bad bills were passed, good ones were killed, but more often than not, members were paralyzed by the fear of antagonizing potential contributors. Also, the electorate was constantly reminded during the 1982 elections of the considerable sums candidates spent on their campaigns. They were clearly turned off by politicians who tried to "buy" elections.

The 98th Congress will certainly be marked by calls for election reforms. For example, Rep. David Obey (D-Wis.) plans legislation that restricts the amount of PAC funds a candidate may receive to $90,000, limits campaign expenditures to $180,000 in the general election, and allows media time for a candidate's response to an attack by an independent political group. Proxmire has introduced similar legislation.

If a balance is not struck, between public and private interests, public financing of campaigns will become more attractive. Presidential candidates already receive public funds in the general election if they represent a major party or demonstrate strong support in the polls. Under Rep. Obey's proposal candidates could have campaign contributions matched by public funds if they and their opponents agree to this financing plan. Chairman Mathias also supports public campaign financing.

The outcome of this debate will be worth watching because, as Drew points out, "what is at stake is the idea of representative government, the soul of this country." ✷

ENERGY PACS EXPANDING

ENERGY PACS PLAY A MAJOR ROLE in "bankrolling" congressional campaigns.

A series of reports by the Citizen/Labor Energy Coalition (CLEC) found oil and gas contributions played "a major role" in the 1982 election. CLEC's October 1982 study showed 196 industry PACs contributed $6.8 million to congressional candidates, surpassing the $6 million given in the 1980 elections. CLEC Director Robert Brandon predicted total 1982 contributions would exceed $8 million. CLEC said energy PAC contributions, as of June 30, 1982, accounted for one out of every five dollars given by corporate PACs, and exceeded contributions made by all independent PACs.

"Contributions by these PACs represent only a portion of the total amount given . . . by oil and gas interests," said CLEC. "Individuals with . . . (such) . . . interests have consistently outspent corporate-sponsored PACs. . . . Through September, more than four . . . of every five dollars spent by these PACs were contributed to candidates outside the oil- and gas-producing states of Texas, Louisiana, and Oklahoma. Thus, these PACs have spent heavily to influence races beyond their geographic base."

Electric utility PACs also have become heavily involved in elections. According to John Shlaes, Edison Electric Institute's (EEI) director of planning, investor-owned utility (IOU) PACs gave candidates an estimated $1.5 million in 1982.

Supplementing these donations, the Edison Electric Institute's PAC, the Constructive Congress Committee, donated $72,275 through November 1982. This far exceeded the $40,150 given in the entire 1980 election. By comparison, ACRE contributed $244,525 in 1979 and 1980, and through late 1982 had given another $400,000.

What's at stake for these groups and who benefits from their contributions?

As Elizabeth Drew describes it, PACs have a "honeylike attraction" to members of the House Energy and Commerce Committee. The committee has jurisdiction over many federal regulatory agencies and a wide range of issues, including transportation, oil and natural gas, electric utilities, environment, health and finance. Transportation, drug/medical and energy PACs gave nearly $1.9 million, $830,000 and $430,000 respectively to committee members. Overall, interest groups donated more than $5.5 million.

Rep. Philip Sharp's (D-Ind.) experience as a senior member of the committee is illustrative. Sharp is chairman of the subcommittee on fossil and synthetic fuels. Because he represents a marginally Democratic district, he agreed to accept PAC contributions from affected industry groups for the first time in 1982. Among those who contributed were pipeline companies, utilities, and producers of oil, gas and coal, including some who supported his opponent. As Sharp said, "By virtue of being a member of the Energy and Commerce Committee, you tend to get that kind of contribution. I think it's clear that because you're chairman of a subcommittee and number six in rank on the (full) committee people on both sides of the issues will contribute."

CLEC found the number of oil and gas PACs has increased substantially since 1976 — from 66 to 196. CLEC said "this growth has been sparked by the industry's ambitious legislative agenda which, in the next Congress, will include natural gas decontrol, taxation of crude oil profits, oil pipeline deregulation, and the Alaska natural gas pipeline."

The CLEC study revealed 12 Senate candidates each received industry contributions totaling more than $60,000. Sens. Lloyd Bentsen (D-Texas), Harrison Schmidt (R-N.M.) and Orrin Hatch (R-Utah) received the most. Seventeen House candidates each got $25,000 from these PACs. Congressmen Phil Gramm (D-Texas), John Rousselot (R-Cal.) and Clint Roberts (R-S.D.), and Mississippi Republican candidate Liles William received the biggest donations. Despite this help, Schmidt, Rousselot, Roberts and Williams lost. (Gramm won then resigned to run as a Republican after House Democrats removed him from a coveted committee position.)

EEI's PAC favored Republicans slightly over Democrats. However, ENERGY DAILY noted EEI "kept its contributions tailored to the distribution of power in Congress." In Senate races, it gave $1,000 to Sens. John Melcher (D-Mont.) and Henry Jackson (D-Wash.), both members of the Energy Committee. On the House side, money went to key members — Reps. John Dingell (D-Mich.), Energy Committee chairman; Don Fuqua (D-Fla.), Science and Technology chairman; and Dan Rostenkowski (D-Ill.), Ways and Means chairman.

EEI and its utility members deviated from this course in one race — the contest between House Energy Conservation and Power Subcommittee Chairman Richard Ottinger (D-N.Y.) and Jon Fossel. Although Fossel received over $8,000 in investor-owned utility industry PAC contributions, he failed to defeat Ottinger.

Finally, rural electric cooperatives made their interests known in Congress, particularly on a Reagan administration proposal to cut off Federal Financing Bank low-interest loans. Although ACRE's contributions were heavily Democratic, ACRE has helped supportive Republicans. NRECA gained bipartisan support to defeat the administration's proposal. ✷ **TED HANDEL**

CONTRIBUTIONS BY THE 10 LARGEST IOU PACs
During the 1982 Election Campaign

Utility	*Amount**
Southern California Edison	$119,750
Consumers Power	60,665
Consolidated Edison of New York	53,025
Florida Power and Light	50,450
Carolina Power and Light	45,910
Houston Industries	38,700
El Paso Electric	37,995
Long Island Lighting	31,721
Texas Electric Service	29,150
Baltimore Gas and Electric	27,650

Source: Federal Election Commission

*Note: This represents the amount given by the PAC to federal and state candidates and other political committees.

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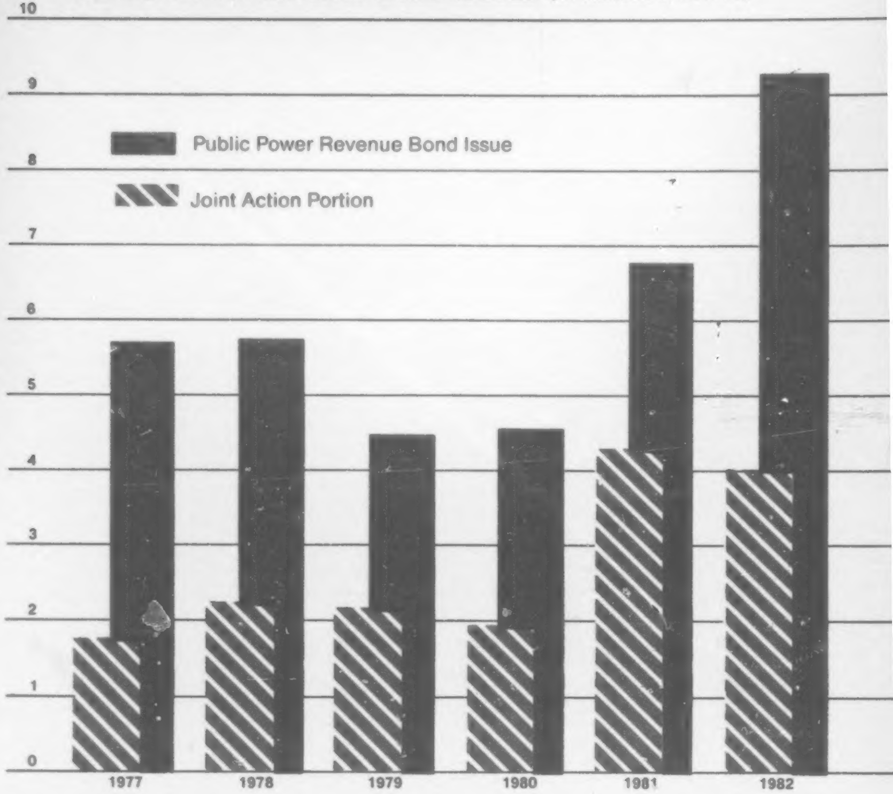
Public Power Bond Issues Up 35%

PUBLIC POWER REVENUE BOND ISSUES *(in millions of dollars)*



Total Bonds Issued by Joint-Action Public Power Systems

Issuer	1975–1982	Total (000)
Connecticut Municipal Electric Energy Cooperative		$ 43,000
Heartland Consumers Power District		240,100
Intermountain Power Agency		1,500,000
Kansas Municipal Energy Agency		22,885
Louisiana Energy and Power Authority		109,515
Massachusetts Municipal Electric System		26,100
Massachusetts Municipal Wholesale Electric Co.		1,117,870
Michigan Public Power Agency		44,370
Michigan South Central Power Agency		95,040
Mississippi Municipal Energy Agency		3,300
Municipal Electric Authority of Georgia		1,425,000
North Carolina Municipal Power Agency Number 1		1,275,000
North Carolina Eastern Municipal Power Agency		1,300,000
Northern California Power Agency		55,000
Northern Municipal Power Agency		268,000
Platte River Power Authority		652,100
Sam Rayburn Municipal Power Agency		319,390
City of Sikeston, Mo.		250,000
Southern California Public Power Authority		720,000
Texas Municipal Power Agency		1,226,300
Utah Associated Municipal Power System		66,000
Vermont Public Power Supply Authority		25,500
Washington Public Power Supply System		8,120,000
Western Minnesota Municipal Power Agency		164,850
Wyoming Municipal Power Agency		21,540
8-Year Total		$19,090.860

LOCAL PUBLICLY OWNED ELECTRIC utilities issued a record $9.2 billion worth of electric revenue bonds in 1982. This was a 35 percent increase from the $6.8 billion they sold in 1981, which had been a 46 percent increase over the $4.66 billion sold in 1980.

All tax-exempt bond sales, which had decreased by 2 percent to $45.3 billion in 1981, increased by 65 percent to $74.9 billion last year.

Public power revenue bonds amounted to 12.3 percent of all tax-exempt bonds sold in 1982, compared with about 15 percent in 1981 and 10 percent in 1980, according to Lehman Brothers Kuhn Loeb's annual compilations of tax-exempt bonds.

The two joint-action agencies which issued more than $1 billion in bonds last year were Washington Public Power Supply System (WPPSS), with $1.53 billion, and North Carolina Eastern Municipal Power Agency, with $1.3 billion. WPPSS also placed the largest single issue last year, $850 million, on Feb. 11.

Joint-action agencies accounted for $5.2 billion of the $9.2 billion public power bond total, more than 56 percent, as compared with 63 percent of the public power total in 1981 and 42 percent in 1980.

The eight-year total of electric revenue bonds issued by 25 joint-action agencies totals $19.1 billion, an increase of 38 percent over the $13.8 billion issued by 19 joint-action agencies through 1981.

About 42 percent of the $19.1 billion—$8.1 billion—has been issued by WPPSS. The six agencies which issued bonds for the first time last year are Connecticut Municipal Electric Energy Cooperative, Louisiana Energy and Power Authority, North Carolina Eastern Municipal Power Agency, Southern California Public Power Authority, Utah Associated Municipal Power System and the Vermont Public Power Supply Authority.

Sixty-two of the public power issues last year, totaling $7.9 billion, were negotiated; 57 issues, totalling $1.3 billion, were competitive. Within these totals, joint-action agencies negotiated 24 issues totalling $5.2 billion. Only one joint-action issue, for $2.3 million, was competitive. In 1981, 16 joint-action agency issues were negotiated and five were competitive. ✸

Public power revenue bond sales by quarter, in millions of dollars, were:

Quarter	1980	1981	1982
1st	$701	$1,432	$2,611
2nd	770	1,676	2,143
3rd	2,340	2,256	1,425
4th	844	1,442	3,067

MAY-JUNE 1983

public power

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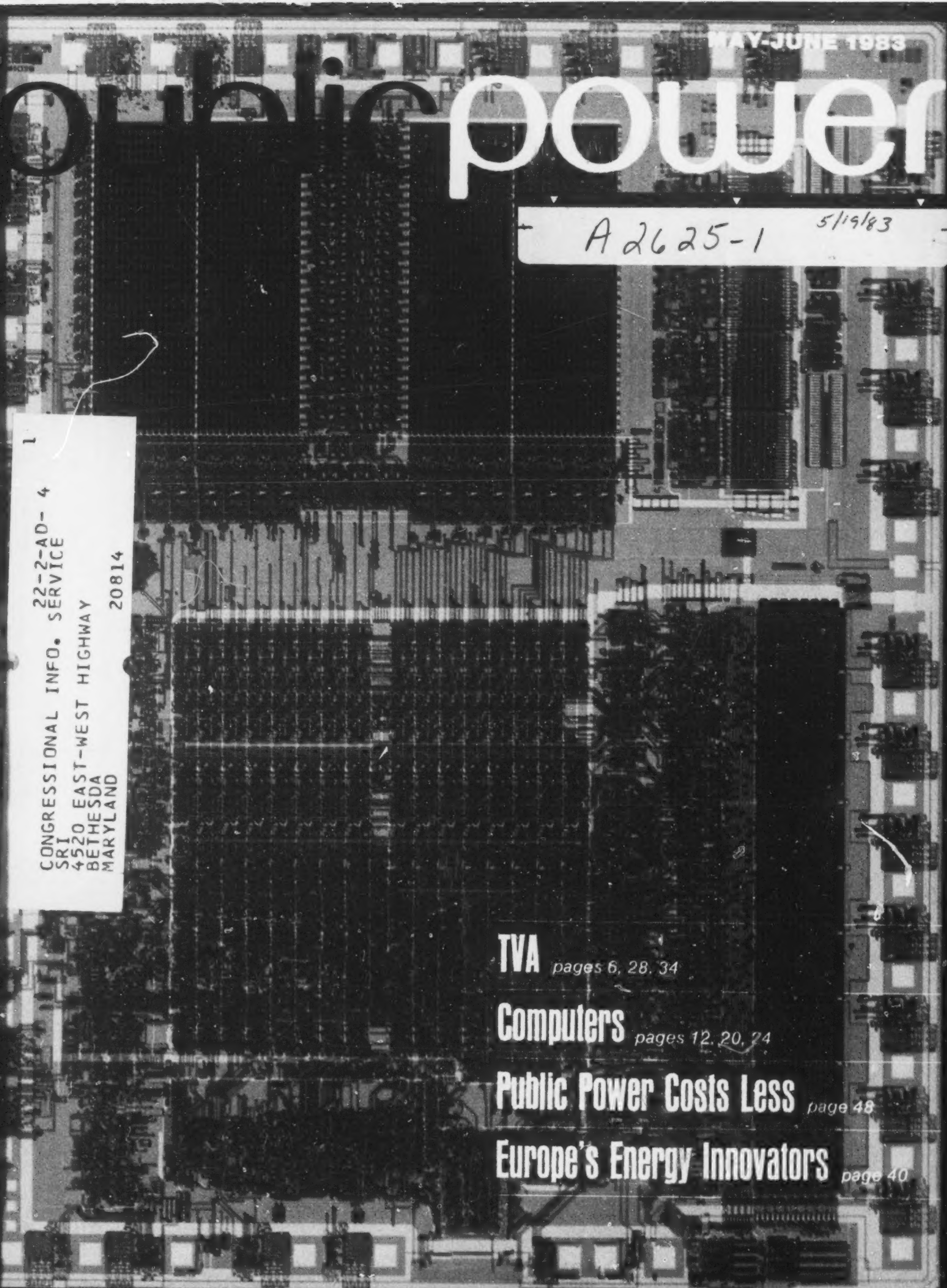

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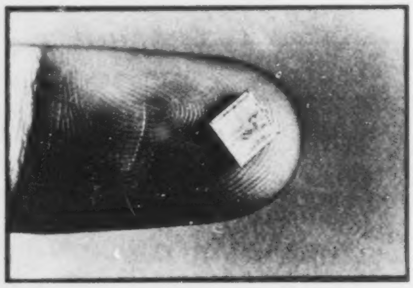

FRONT COVER: The magnified 16-bit TMS9995 microprocessor chip on the cover is actually about the size of the chip on a finger in the photo above. The products and pictures were produced by Texas Instruments Inc., which is conducting a seminar on microcomputer basics prior to APPA's microcomputer applications workshop in Dallas, Texas, May 24-26.

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Computer Use Expands Among APPA Systems

by **MICHAEL K. BERGMAN**, *environmental editor*, PUBLIC POWER, *and* APPA *staff scientist*

COMPUTERS OFFER COST SAVINGS, productivity increases and the ability to perform new tasks. The public power systems which responded to the third APPA computer survey say the rate of computer acquisition by public power systems has been increasing rapidly and these machines are performing a widening variety of tasks. Use of small microcomputers has grown phenomenally — at an annual growth rate of almost 200 percent since 1977.

APPA's 1982-83 survey drew responses from 216 public power systems which own 384 computers and 6,250 remote job terminals. Public power systems use these computers for scores of tasks ranging from billing to monitoring power plants. The current survey and two earlier ones show that more than 350 public power systems use computers for office automation, administration, operations, systems planning, engineering and support.

Figure 1 shows the constant growth rate in computer installations by public power systems since 1974. Though some older computers now in use were installed as early as 1962, only nine machines were acquired before 1974. With numbers of installed microcomputers accelerating, rapid growth in computer use should continue.

The relative distribution among microcomputers, stand-alone systems, minis and mainframes is shown in Figure 2. Loosely defined, minicomputers and the larger "super-minis" fit into the categories in Figure 2 indicating two to 48 terminals and in the "other" category. Thus, microcomputers now represent close to 25 percent of the machines reported, mainframes about 5 percent; the medium-sized minicomputers account for the remaining 70 percent or so.

An increase in hardware vendors is another consequence of rapidly changing technology. Traditional vendors such as IBM, Hewlett-Packard, Burroughs, Digital Equipment and NCR are still dominant, but many new vendors have entered the market in the last few years.

Market share by vendor is shown in Table 1 below:

TABLE 1

Total number installed computers	384
Total number hardware vendors	39
Percent Share	
IBM	26%
Hewlett-Packard	16
Burroughs	9
Apple	9
NCR	7
DEC	6
Data General	4
Prime	3
31 other manufacturers	20

The market shares of both Apple and Hewlett-Packard are large because single utilities have made multiple purchases. In the case of Apple, individual utilities have bought as many as eight or nine machines apiece. For Hewlett-Packard, one utility has 25 HP125s and another has nine Model 2108s. If a single utility reported multiple computers all machines often came from the same vendor.

Apple, Hewlett-Packard, Radio Shack and IBM are the most popular microcomputers with Apple alone accounting for one-third of the market. All told, 17 vendors have sold microcomputers to public power systems responding to the APPA survey. Proliferation of microcomputer vendors should enhance competition.

Figure 1. Number of Computers Installed by Public Power Systems

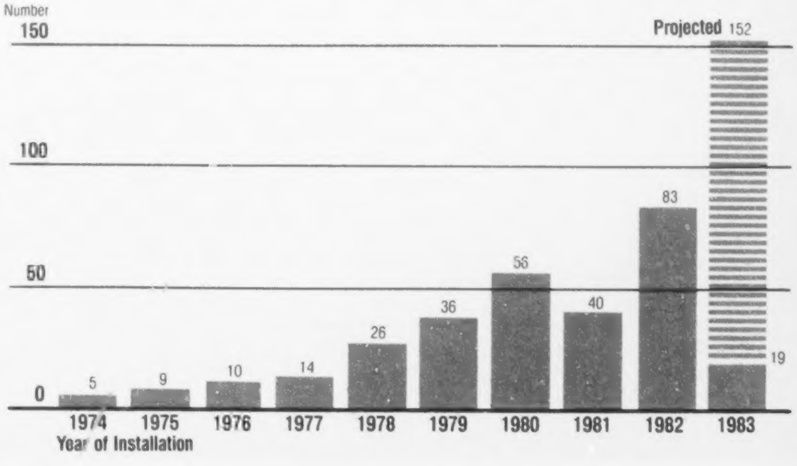


Figure 2. Number of Terminals per Computer

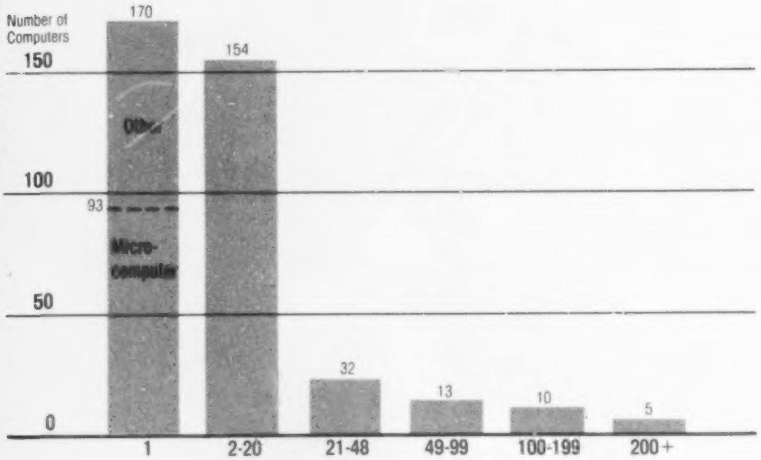
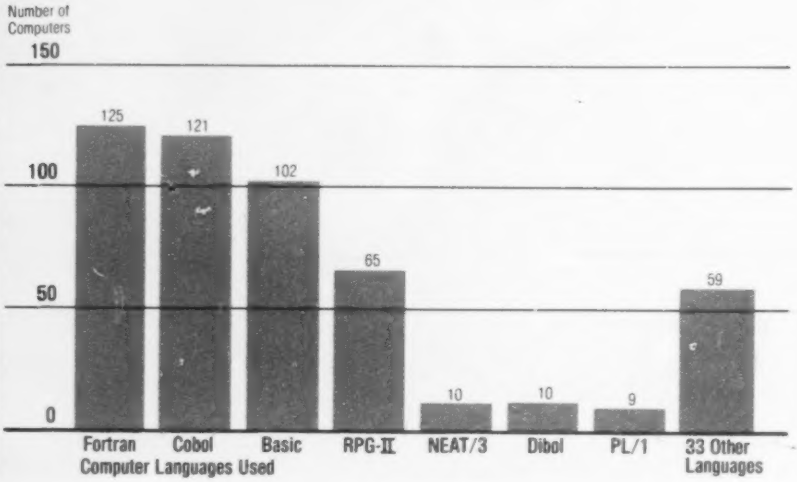


Figure 3. Occurrence of Computer Languages



Standards Needed

Lack of standardization still plagues the developing computer industry. Because of the extreme diversity of operating systems — that is, the way computers handle internal tasks and communicate with peripherals — no attempt has been made to compile individual survey responses. But even on the more uniform level of software languages there is substantial diversity.

Figure 3 shows that Fortran, Cobal and Basic are the three most popular software languages. More than 40 software languages, however, are used by public power computers, 20 on only one machine. This diversity in language results mainly because certain hardware vendors offer their own languages. Combined with the diversity in operating systems, the prospects for the substantial sharing of software among public power systems appear dim for now.

The justification for acquiring a computer depends on the tasks it can perform. Combined, total computer time as reported breaks down as follows:

Operations	52%
Administration	31%
Engineering and support	12%
System planning	5%

Only the areas of administration, operations and engineering and support had computers devoted exclusively to their application. Interestingly, use of computers for systems planning and engineering applications has been rapidly increasing in recent years, due in large measure to the greater use of microcomputers.

More than 30 different software applications were noted in the surveys; the most popular software, by far, dealt with billing, payroll, general ledger and equipment inventory. These same programs were also more likely to have been developed and maintained in-house.

The summary of software applications is shown in Table 2 (with number of programs developed and maintained in-house by survey respondents in parenthesis).

TABLE 2

OPERATIONS	
Dispatch	31 (5)
Vehicle maintenance	12 (9)
Maintenance scheduling	25 (7)
Bulk power transmission/ purchases	24 (4)
SCADA	9 (2)
Meter reading/inventory	8 (3)
ADMINISTRATION	
Billing	183 (75)
Payroll	160 (54)
Budgeting	116 (18)
General ledger/cost accounting	111 (43)
Financial planning	85 (13)
Miscellaneous	76 (10)
Procurements	38 (7)
Materials	12 (10)
Property records	5 (4)
Assessments	4 (3)
SYSTEMS PLANNING	
Load forecasting	50 (9)
Statistical analysis	49 (5)
Production costing	25 (4)
Capacity expansion	21 (2)
Rate design/analysis	7 (3)
ENGINEERING AND SUPPORT	
Equipment inventory	74 (30)
Load flow and fault analysis	43 (9)
Load research	41 (6)
Cost of services	40 (5)
Project management	31 (5)
Distribution planning	29 (2)
Air quality reporting	10 (4)
Load management	9 (2)
Energy management/audit	8 (7)
Generation monitoring	8 (5)
OTHER	22 (15)

In addition to these in-house computer capabilities, 56 utilities reported they subscribed to time-sharing services — frequently with local universities for specialized computing. Thirty-one time-sharing vendors were reported: none of them dominated the market. Most utilities reported connection rates with time-sharing services at speeds of 300 or 1,200 baud. (A baud is one bit per second.) Several utilities reported spending more than $5,000 a month for time-sharing.

Individual survey responses, cross-indices by utility to hardware and software, and additional summary results will be available in the forthcoming report, "APPA's 1982-1983 Computer Survey." Copies will be available from the APPA publications department. ✸

public power costs less

IOU residential rates averaged 43.5% higher in 1981

by JEANNIE KILMER, *contributing editor, PUBLIC POWER, and APPA manager of statistics and data processing*

LATEST OFFICIAL FIGURES demonstrate once again that the consumer-owners of the nation's local publicly owned electric utilities enjoy electric rates significantly lower than those paid by customers of private power companies.

Comparative statistics for 1981, just published by the Department of Energy's Energy Information Administration (EIA) continue the annual electric utility industry statistical series begun by the former Federal Power Commission in 1946. Each report has shown that the local publicly owned segment of the pluralistic electric utility industry has been the leader in providing consumers with lower cost power.

The data appear in EIA's publications of statistics for electric utilities, privately owned and publicly owned. These reports represent nearly 100 percent of the investor-owned utilities (IOUs) and a lesser portion of the publicly owned systems. EIA's statistics for 1981 cover 204 private power companies and 162 local publicly owned electric utilities. EIA statistics for publicly owned utilities have been supplemented with data for an additional 110 municipal utilities published in "1981 TVA Power Program Summary, Volume II." These 110 utilities were included in the EIA or FPC reports for 1978 and earlier years.

The average residential consumer in a local public power system used 25.5 percent more electricity in 1981 than the average residential customer of the private power companies — 10,391 kWh to 8,277 kWh. But the public power consumer paid 14.3 percent less on the average for 25.5 percent greater annual consumption — $448.79 to $513.11. Average residential revenue for the companies in 1981 was 6.20 cents per kWh, 43.5 percent higher than the public systems' average of 4.32 cents per kWh. Or, to phrase it differently, average residential rates paid by public power customers were 30.3 percent below the average paid by customers of IOUs.

SALES:	TO RESIDENTIAL CONSUMERS[1]						TO COMMERCIAL AND INDUSTRIAL CONSUMERS[1]					
	Average Annual kwh Consumption		*Average Revenue Per kwh (cents)*		*Average Annual Bill (dollars)*		*Average Annual kwh Consumption*		*Average Revenue Per kwh (cents)*		*Average Annual Bill (dollars)*	
	Private	*Public*	*Private*	*Public*	*Private*	*Public*	*Private*	*Public*	*Private*	*Public*	*Private*	*Public*
1946	1,298	1,739	3.29	2.32	42.67	40.32	28,110	22,475	1.50	1.29	421.55	289.24
1950	1,767	2,518	2.95	1.99	52.14	50.06	33,653	25,124	1.54	1.33	518.55	334.40
1955	2,573	3,824	2.76	1.69	70.97	64.63	49,038	38,329	1.45	1.19	711.04	457.55
1960	3,454	5,208	2.62	1.58	90.51	82.46	61,944	49,421	1.49	1.22	922.71	604.69
1965	4,618	6,634	2.39	1.53	110.53	101.26	79,201	66,396	1.40	1.18	1,109.26	783.93
1966	4,931	7,007	2.34	1.50	115.37	105.13	85,265	70,557	1.37	1.16	1,168.58	818.81
1967	5,220	7,317	2.31	1.49	120.38	108.90	89,347	74,373	1.37	1.16	1,224.13	865.43
1968	5,706	7,880	2.28	1.47	128.43	115.93	96,332	79,687	1.36	1.15	1,307.14	916.71
1969	6,246	8,546	2.21	1.45	137.99	123.90	102,965	85,683	1.36	1.15	1,395.61	983.24
1970	6,700	9,015	2.22	1.47	148.92	132.89	107,041	89,653	1.40	1.17	1,502.43	1,052.87
1971	7,039	9,378	2.32	1.56	163.08	146.47	110,973	92,778	1.50	1.26	1,671.12	1,170.33
1972	7,391	9,630	2.42	1.63	178.96	156.95	117,793	98,384	1.58	1.31	1,863.05	1,294.31
1973	7,742	10,080	2.54	1.70	196.54	170.80	124,082	103,785	1.68	1.40	2,083.46	1,449.28
1974	7,550	9,797	3.10	1.94	233.85	190.54	121,112	102,974	2.19	1.64	2,655.04	1,693.43
1975	7,830	10,125	3.51	2.33	275.17	236.19	119,381	110,076	2.62	1.97	3,127.77	2,178.01
1976	7,840	9,539	3.78	2.79	295.94	265.76	125,296	111,414	2.82	2.38	3,531.09	2,654.90
1977	8,256	10,791	4.06	2.79	334,92	300.91	130,602	124,331	3.12	2.38	4,076.98	2,954.33
1978	8,453	11,383	4.31	3.00	364.35	341.23	132,610	129,874	3.39	2.65	4,497.61	3,444.14
1979	8,319	10,940	4.64	3.22	385.70	352.43	133,355	129,342	3.66	2.88	4,877.69	3,722.15
1980	8,531	10,744	5.36	3.77	457.23	405.07	129,499	124,586	4.38	3.41	5,673.85	4,251.19
1981	8,277	10,391	6.20	4.32	513.11	448.79	129,022	126,429	5.07	3.88	6,542.72	4,902.13

[1] *Care should be taken in the use of this data due to year-to-year variations in sample size.*

1.88¢ per kWh Difference

Thus, on the average, residential customers of the private power companies paid 1.88 cents more for each kWh of electricity used in 1981 than consumers served by local publicly owned electric utilities. In 1980 the spread was 1.59 cents per kWh.

Revenue per kWh of electricity sold to residential consumers increased in 1981 for both the privately owned and publicly owned electric utilities. In the case of the public systems, revenue per kWh of residential use went up from 3.77 cents per kWh in 1980 to 4.32 cents per kWh in 1981. For the private companies, average revenue per kWh of electricity sold to residential customers climbed from 5.36 cents to 6.20 cents in 1981.

In 1981 the average commercial or industrial customer of a private power company used 3.6 percent more power than the average commercial or industrial user served by a local public power system (129,022 kWh to 126,429 kWh). But the private utility average customer's annual bill was 33.5 percent more ($6,543 to $4,902).

Average commercial and industrial revenue for the privately owned companies, 5.07 cents per kWh, was 30.7 percent higher than the 3.88 cents per kWh for the publicly owned systems.

Average commercial and industrial revenue per kWh was higher in 1981 than in 1980 for both the private and publicly owned utilities — up from 4.38 cents to 5.07 cents per kWh for the companies, and from 3.41 cents to 3.88 cents per kWh for the public systems.

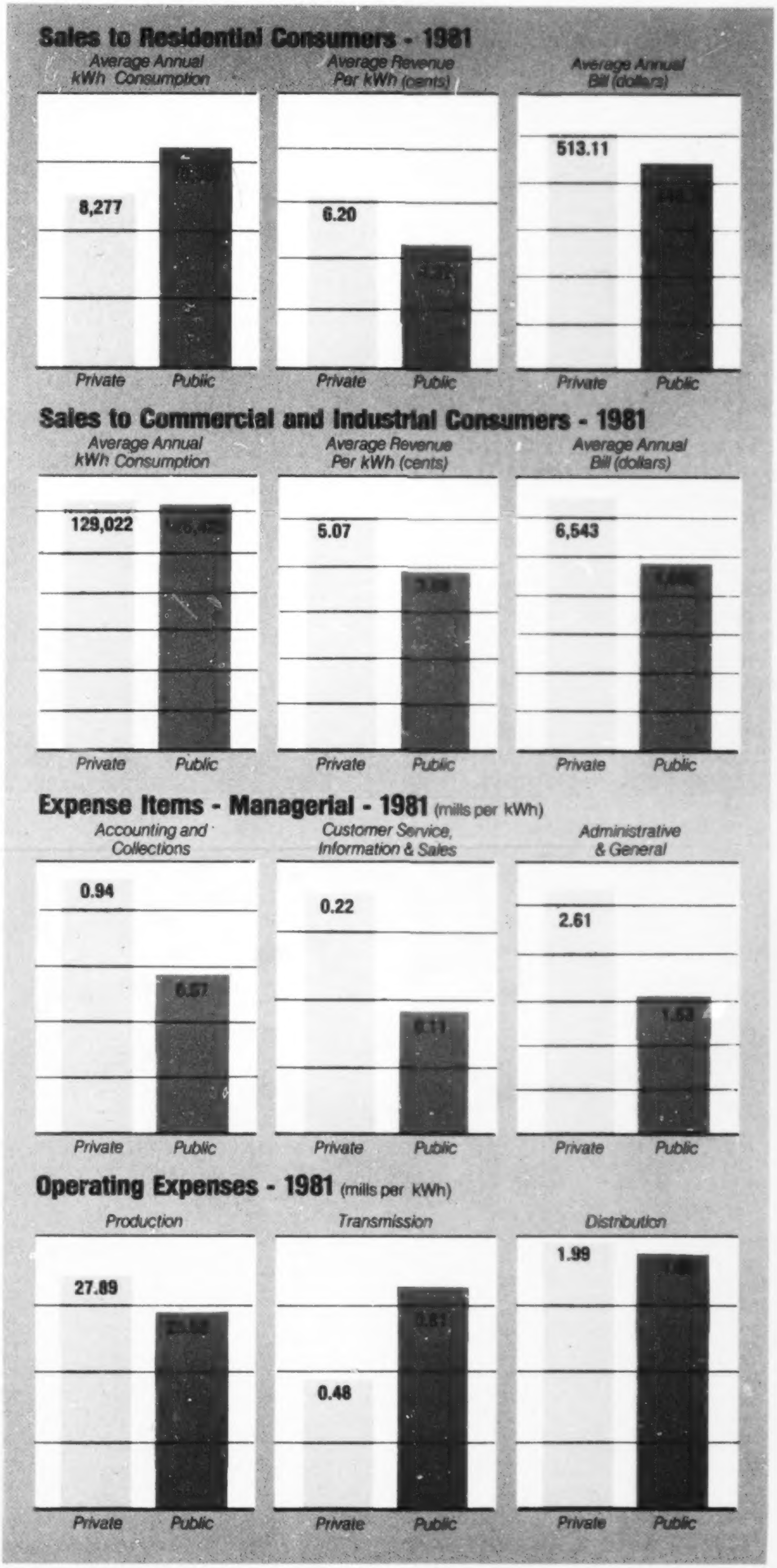
IOU Expenses Higher

Administrative and general expenses reported by the public systems were lower than the private power companies' on the basis of expense per $100 of revenue ($4.22 to $5.05) and on the basis of kWh sold (1.53 mills per kWh for the publicly owned systems compared to 2.61 mills per kWh for the companies).

Accounting and collections per customer cost the investor-owned utilities $25.82 in 1981, compared with $20.87 for the publicly owned utilities. This cost was $3.31 higher than 1980 for the IOUs and rose $2.47 for the public systems.

On the basis of kWh sales, accounting and collections cost the companies 0.94 mills per kWh, compared with 0.57 mills per kWh for publicly owned utilities.

In 1981, the private power companies spent 42 cents of each $100 of revenue for customer service, information and sales expenses (previously reported as promotion and advertising expenses), up five cents



from 1980; the publicly owned systems spent 31 cents of each $100 of revenue for this item, up three cents from the previous year.

Customer service, information and sales expenses of the companies were 0.22 mills per kWh sold, compared with 0.11 mills for the public power systems.

Production Costs Up

Production costs per kWh were lower in the public systems than the companies in 1981, for the 12th consecutive year. In 1981, both the privately owned utilities and the public power systems experienced sharp increases in production costs over the previous year: from 24.14 mills per kWh in 1980 to 27.89 mills per kWh in 1981 for the companies; and from 20.16 mills per kWh to 23.53 mills per kWh in 1981 for the publicly owned utilities.

Distribution expenses per customer rose for both types of systems in 1981 — from $41.90 in 1980 to $45.19 in 1981 for the companies, and from $44.83 in 1980 to $48.97 in 1981 for the public systems. Distribution expenses for the companies was 1.99 mills per kWh sold to ultimate customers, compared to 1.90 mills per kWh sold to ultimate customers by the publicly owned utilities.

For the fifth year since the federal statistics have been published, IOU transmission costs were lower. In 1981 their transmission expenses per kWh rose to 0.46 mills, up from 0.43 mills in 1980 and 0.40 mills in 1979; the public systems' transmission costs in 1981 were 0.81 mills per kWh, up from 0.68 mills in 1980 and 0.67 mills in 1979.

The publicly owned electric utilities had electric operating revenue of 3.63 cents per kWh sold in 1981, while the privately owned electric utilities had operating revenues of 5.16 cents per kWh. The private companies had net interest charges which equaled 0.46 cents for each kWh sold and dividends on preferred and common stock equal to, respectively, 0.11 cents and 0.39 cents per kWh sold. The publicly owned utilities had total income deduction equal to 0.50 cents per kWh sold in 1981.

The cost of debt and equity capital for the privately owned utilities was equal to 16.1 percent of operating revenue. The public systems, which do not pay dividends to private stockholders, paid the equivalent of 13.9 percent of their operating revenue as interest on long-term debt and for other income deductions.

These latest statistical reports show that in 1981, as in the previous 35 years since the comparative statistics have been published, the local publicly owned electric utilities are leading the industry in providing economical electric service to consumers. ✸

EXPENSE ITEMS

OPERATIONS

	Production		Transmission		Distribution	
	Per kwh Sold (in mills)		*Per kwh Sold (in mills)*		*Per Customer (in dollars)*	
	Private	*Public*	*Private*	*Public*	*Private*	*Public*
1946	4.35	4.30	.27	.14	9.37	9.19
1950	4.96	4.68	.26	.13	12.04	11.77
1955	4.42	4.68	.26	.13	14.18	13.79
1960	4.20	4.70	.25	.15	16.19	10.24
1965	3.98	4.34	.21	.15	17.48	17.93
1966	4.01	4.36	.21	.16	17.84	18.54
1967	4.03	4.31	.21	.15	18.67	19.37
1968	4.09	4.16	.21	.15	19.31	20.43
1969	4.21	4.23	.22	.13	20.56	22.88
1970	4.76	4.61	.23	.15	22.14	24.15
1971	5.49	5.25	.24	.16	22.82	25.41
1972	5.97	5.71	.25	.16	24.13	26.02
1973	6.70	6.47	.26	.17	25.52	27.53
1974	10.72	8.01	.29	.18	26.46	29.98
1975	12.70	9.35	.31	.21	27.63	31.78
1976	13.73	12.04	.34	.29	29.51	34.18
1977	15.87	13.28	.35	.54	31.76	33.78
1978	17.27	14.37	.37	.64	34.81	35.94
1979	19.69	16.32	.40	.67	37.68	38.17
1980	24.14	20.16	.43	.68	41.90	44.83
1981	27.89	23.53	.48	.81	45.19	48.97

MANAGERIAL

	Accounting and Collections Per Customer (in dollars)		*Customer Service Information and Sales Per $100 Revenue (in dollars)*		*Administrative and General Per $100 Revenue (in dollars)*	
	Private	*Public*	*Private*	*Public*	*Private*	*Public*
1946	3.73	2.82	1.77	1.03	7.22	6.11
1950	4.44	3.35	1.79	1.11	7.90	6.85
1955	5.33	4.00	1.73	.95	6.73	6.59
1960	6.38	4.94	1.70	1.04	6.29	6.31
1965	7.06	6.15	1.79	1.14	6.23	5.80
1966	7.18	6.13	1.83	1.09	6.00	5.84
1967	7.34	6.48	1.79	1.10	5.87	6.23
1968	7.68	6.78	1.75	1.10	5.70	6.10
1969	8.11	7.36	1.69	1.08	5.74	6.08
1970	8.86	7.98	1.54	1.01	5.87	6.25
1971	9.61	8.77	1.30	.89	5.84	6.06
1972	10.31	9.18	1.00	.80	5.88	5.96
1973	11.33	9.55	.74	.67	5.78	5.79
1974	13.26	10.61	.42	.50	5.19	5.65
1975	15.25	12.33	.30	.35	4.98	5.14
1976	16.34	14.50	.27*	.28	4.99	5.09
1977	17.17	12.75	.36	.22	4.94	4.68
1978	18.59	15.87	.36	.22	5.11	4.64
1979	20.25	16.41	.38	.29	5.21	4.24
1980	22.51	18.40	.37	.28	5.08	4.45
1981	25.82	20.87	.42	.31	5.05	4.22

(*) "Customer Service, Information and Sales" was formerly listed as "Promotion and Advertising." The 1976 and subsequent annual figures reflect a federal reporting change which combined sales expenses with customer service and information expenses.

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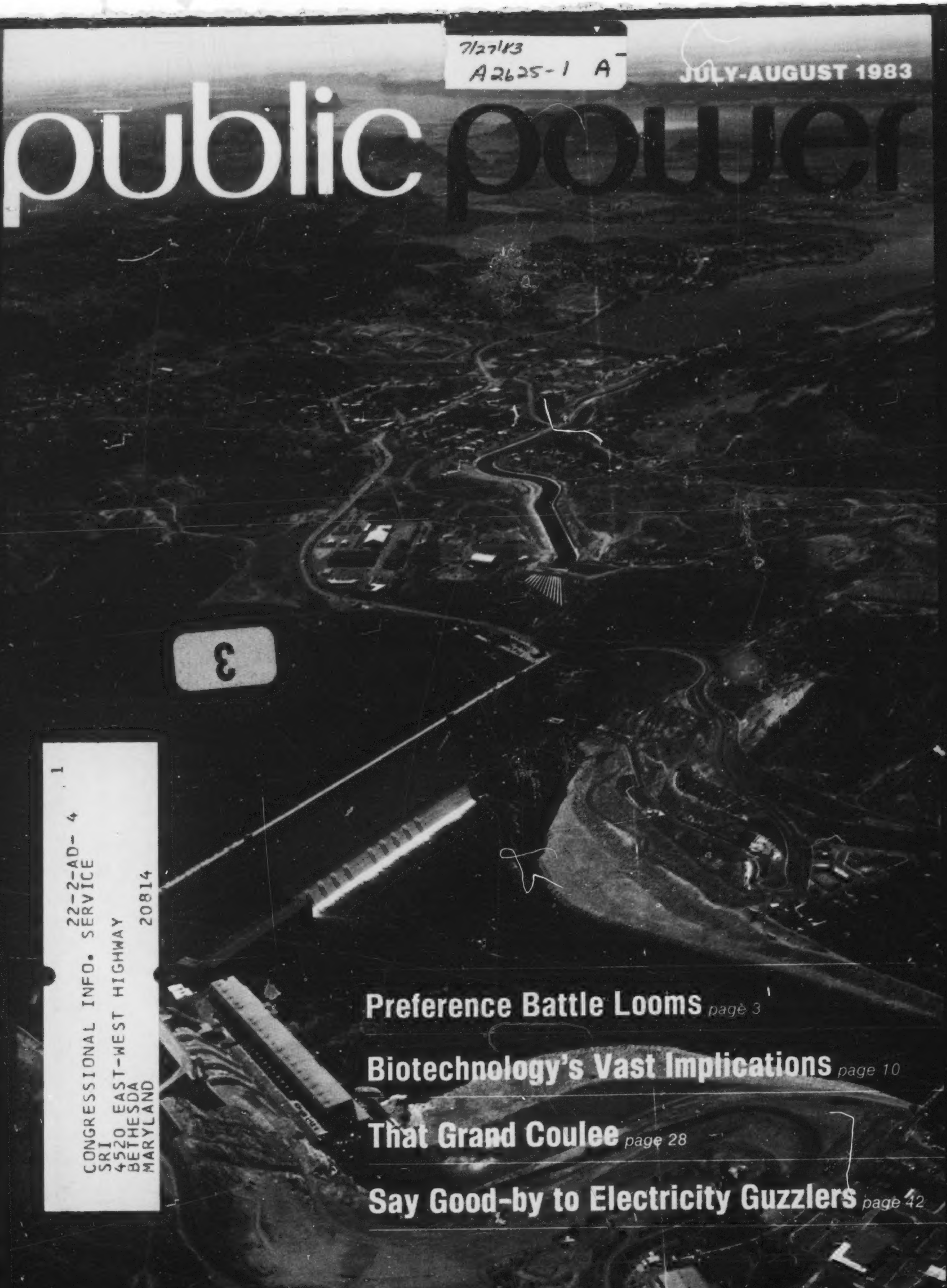

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Say Good-by to Electricity Guzzlers

The top-rated Amana TSC-18E frost-free refrigerator/freezer costs only about $100 more than a standard model, but its annual operating cost is about $30 lower than that of the standard model for a typical consumer.

by HOWARD S. GELLER

THE COST OF OPERATING residential appliances has become a major expense. A typical household paying seven cents per kWh will spend more than $700 a year operating a refrigerator, freezer, electric water heater, range, clothes washer and dryer, lights and other electrical appliances. Heating and air conditioning could add another $800 or more per year in a typical all-electric home. Moreover, the energy cost for operating appliances over their useful life is a number of times greater than their first cost.

Geller is a research associate at the American Council for an Energy-Efficient Economy (ACEEE). Its new handbook for energy officials, "ENERGY-EFFICIENT APPLIANCES," is available from ACEEE, 1001 Connecticut Ave. N.W., Suite 530, Washington D.C. 20036.

From the national perspective, residential appliances and heating and cooling equipment consumed one-third of the electricity produced in the United States during 1980. Refrigerators alone use the output of about 25 large 1,000-MW power plants, nearly 7 percent of the nation's total electricity consumption and more than 50 percent of U.S. nuclear power generation. Residential air conditioners place enormous demands on peak generating capability and use this capacity very inefficiently.

What can consumers and electric utilities do about this situation? Surprisingly, a great deal. Consumers through informed purchase decisions and utilities through creative, well-designed programs can substantially reduce the operating cost and power demand from residential equipment.

Efficiency Varies 100% Or More

When purchasing appliances, consumers can select from models which vary greatly in efficiency and energy consumption. For refrigerators, air conditioners and water heaters, similar models, in terms of service and features, differ in efficiency by up to 100 percent or more.

Table I lists the highly efficient top-rated models already available and their efficiencies in comparison with typical models sold in 1980. The performance values are based on standardized testing procedures established by the Department of Energy. Clearly, residential electricity demand would be much reduced if consumers purchased available low-energy models.

The refrigerator/freezer demonstrates what can be accomplished through a series of fairly modest design changes. In the early 1970s, the standard frost-free, 16-cubic-foot refrigerator/freezer was an "electricity guzzler" consuming about 1,700 kWh per year. In contrast, the top-rated frost-free refrigerator/freezer in early 1983 (an 18-cubic-foot model made by Amana) consumes only about 870 kWh per year. The high-efficiency model boasts separate refrigerator and freezer cooling units, three-inch polyurethane foam insulation around the freezer, up to two and one-fourth inches of foam around the refrigerator, an improved door seal, a more efficient condenser fan motor, and natural convection air circulation in the refrigerator. Isolating the air in the refrigerator and freezer keeps food fresher and moister besides reducing operation of defrost heaters.

The major gain in electric water-heating efficiency was made possible by the heat-pump water-heater (HPWH). This device functions like a refrigerator or air conditioner, using a compressor to move heat from a cooler to a warmer region. Heat-pump water-heaters are most attractive in hot climates where heat withdrawn from indoor air is beneficial much of the year. In northern parts of the United States, an HPWH in an unheated basement can still save 30 percent or more of the electricity which a resistance water-heater would use. The top-rated HPWH consumes only about 35 percent as much electricity as the standard electric water-heater of the late 1970s.

For air conditioners and heat pumps, large improvements in overall efficiency have been achieved through design modifications and better components. These include larger condenser and evaporator coils, more efficient motors, oversized, derated compressors and improved controls.

One problem with most air conditioners and heat pumps is that they are controlled by turning the compressor on or off instead of adjusting the compressor's output to match demand. Advanced models such as the highly efficient central air conditioners and heat pumps made by Lennox Industries include two-speed compressors, dual compressors or even continuous speed modulation. Of course, improvements in heat pump efficiency add to the large energy-savings potential this device already offers compared to electric resistance heating.

In residential lighting, various alternatives to ordinary incandescent lights — which waste 80 to 90 percent of the electricity they consume as heat — are now available. "Circlite" or "circline" fluorescent light fixtures which screw into conventional light sockets use from 50 to 65 percent less energy than incandescent bulbs of equivalent light output. However, they have limited applicability because they are much larger than ordinary bulbs. Compact flu-

THERMA-STOR

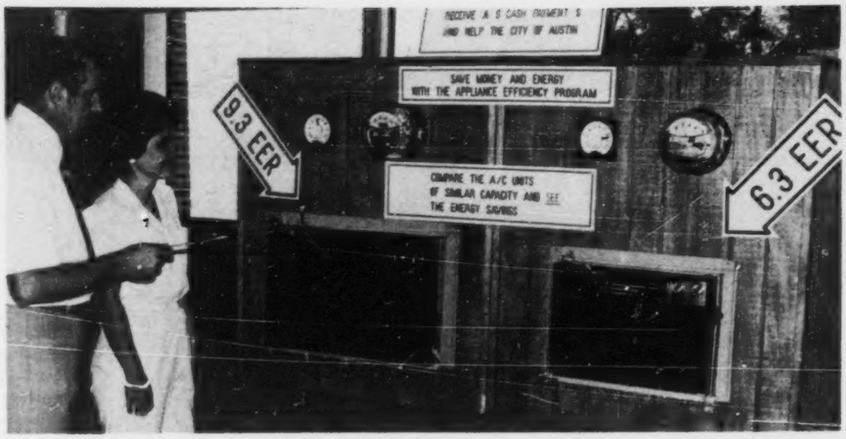
The heat-pump water-heater began a new era in efficient home hot-water heating. The top-rated Therma-Stor, made by DEC International, saves about two-thirds of the electricity which a conventional electric hot-water heater would use. Although the Therma-Stor costs about $1,500 it is a much better investment for a typical household than a savings account or money-market fund. And the savings are above inflation and tax-free.

TABLE I. Comparison of Highly Efficient and Typical Models for Major Electrical Products

Product	Efficiency Parameter	Efficiency of Typical Models Sold in 1980	Highly Efficient Models Available in 1982	Efficiency of Top Models Available in 1982
Electric heat pump	Heating coefficient of performance (COP)	1.7	Rheem/Ruud RPGA and UPGA series	2.6
Central air conditioner	Seasonal energy-efficiency ratio	7.6	Lennox Landmark IV Series, HS-14	14.0
Room air conditioner	Energy-efficiency ratio	7.0	Carrier FEA 7091	11.0
Electric water heater	Overall coefficient of performance	0.78	DEC International Therma-Stor heat-pump water-heater	2.2
Top-mount refrigerator/freezer with automatic defrost (16-18 ft.^{3})	Annual kWh	1,320	Amana TSC-18E	870
Upright freezer with manual defrost (15-16 ft.^{3})	Annual kWh	880	Kenmore 22166	760

Source: American Council for an Energy-Efficient Economy.

orescent bulbs with up to 75 percent electricity savings are beginning to be manufactured and marketed by Westinghouse and Philips/Norelco. They are only slightly larger than conventional bulbs and provide "warm light" similar to incandescents.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SAVE MONEY AND ENERGY WITH THE APPLIANCE EFFICIENCY PROGRAM
9.3 EER
COMPARE THE A/C UNITS OF SIMILAR CAPACITY AND SEE THE ENERGY SAVINGS
6.3 EER

More than 4,400 customers of the Austin (Texas) Electric Department have purchased high-efficiency air conditioners, heat pumps or alternative water-heating devices for electric water heaters since the city's appliance-efficiency program began in July 1982. Many Austin homebuilders are participating and local dealers are shifting stocks to include only high-efficiency equipment. Here Elmo Miertschin, consumer services supervisor, explains to Janeda Gray, one of the utility's telephone operators, how appliances with higher EERs (energy efficiency ratios) save electricity and money for both the public power system and its customers.

Photo by Bobby Wilder, Austin Electric Department

'The Austin (Texas) Electric Department's rebate covers about one-half the additional cost for the high-efficiency air conditioner.'

Highly efficient residential appliances generally cost more than models of average efficiency (see Table II). For electric water heating, the highly efficient heat-pump water-heater is four to five times more expensive than an ordinary resistance water heater. For the high-efficiency central air conditioner, the first cost approximately doubles. On the other hand, the highly efficient refrigerator and freezer are only about 10 percent more expensive than their counterparts of average efficiency.

Consider Life-Cycle Cost

In terms of total life-cycle cost, the highly efficient appliances and space-conditioning products turn out to be very good investments, as the higher price is recovered early on by reduced operating costs. Table II shows the payback period and the rate of return on the additional investment for some top models currently available. For this analysis, the top models are compared to equivalent models (made by the same manufacturer in most cases) which have an efficiency similar to the average for products produced in 1980. The calculations were done using average electricity prices and estimated average usage factors.

The payback period on the additional first cost ranges from about two to eight years. On average, the payback period is less than half of the products' lifetime. The extra money spent typically returns from 10 to 58 percent per year in operating cost savings, *above inflation and tax-free.* For comparison, the rate of return above inflation and after taxes for other investment opportunities for individuals (e.g., savings accounts or money market funds) is less than 2 percent per year.

Investing in energy-efficient appliances is also highly desirable from a utility and national viewpoint. Investments in efficient appliances are typically more cost effective than investments in generating capacity and certainly less encumbered with financial and environmental risks. Hence, the capital resources of a municipal utility might be better spent subsidizing and accelerating purchase of highly efficient air conditioners, water heaters, and refrigerators than buying new generating capacity.

If efficient appliances are available and make good economic sense, why don't they dominate the market? First, consumers generally are not aware of the wide range of efficiencies available and the cost effectiveness of more efficient models. Traditionally, the best appliance "buy" is the model which provides the desired amenities at the least first cost.

Beginning in 1980, federal law called for efficiency/energy cost labels on refrigerators, freezers, water heaters, dishwashers, clothes washers and room air conditioners. While the labels do give consumers some information needed to make economical appliance choices, they do not tell consumers which models are the most efficient, nor do they address the life-cycle cost issue.

Builders Lack Incentives

A second problem is that many appliances and space-conditioning products are purchased by builders, contractors and landlords. These parties do not pay the operating costs and thus have little incentive to buy more expensive, energy-efficient equipment.

Consumers looking for a replacement air conditioner, water heater, or refrigerator are usually concerned with restoring their service as rapidly as possible. They shop in haste, paying little attention to efficiency or operating cost. The consumer often accepts whatever the seller or contractor can deliver immediately. Even for the purchaser who considers operating cost, other factors — such as convenience, design features, appearance, advertising and durability — may play a more prominent role in the purchase decision.

Some state and federal agencies have established programs to encourage purchase of energy-efficient appliances. The federal labeling program has been mentioned already. California and a few other states

TABLE II. Cost Effectiveness of the Additional Investment for Highly Efficient Products

	Increased First Cost Compared to Standard Model (1982 $)	Payback Period (yrs.)	Real Return on Additional Investment (%/yr.)
Rheem/Ruud RPGA and UPGA heat pump	650	7.5	10
Lennox Landmark IV central air conditioner	1,000	6.9	11
Carrier FEA 7091 room air conditioner	140	5.7	17
DEC International heat pump water heater	1,200	7.1	12
Amana TSC-18E refrigerator/freezer	100	3.2	34
Kenmore 22166 upright freezer	40	1.9	58
G.E. 22-W Circlite fluorescent light	15	4.3	22
Westinghouse 28-W compact fluorescent light	21	4.8	10

Source: American Council for an Energy-Efficient Economy. Cost data obtained from dealers and contractors in the Washington D.C. area.

'DOE's "no standard" standards may prevent or deter states from maintaining or adopting their own energy efficiency standards.'

have instituted minimum-efficiency standards prohibiting sale of energy-guzzling appliances. California officials say these standards have already eliminated the need for one power plant, thus helping hold down electricity costs.

Standards are particularly important for preventing builders, contractors and landlords from purchasing inefficient products. Federal law requires minimum efficiency standards for the nation, although the prospect for meaningful standards has been dimmed by the Reagan administration. The Department of Energy has proposed and begun to implement "no standard" standards which place no restrictions on the efficiency of residential products. Unfortunately, this policy may also prevent or deter states from maintaining or adopting their own standards, thus undermining their efforts to help consumers obtain energy-conserving and cost-effective products.

What Utilities Are Doing

A number of public and private utilities recognize the opportunity for conserving energy and avoiding new energy supply facilities by stimulating purchase of efficient appliances. At least 20 utilities offer rebates to purchasers of relatively efficient residential equipment. Rebate programs are concentrated in southern states such as Texas and Florida where peak summer demand due to residential air conditioning is a major problem. Hence, air conditioners and heat pumps are the most popular products for rebates. A number of municipal utilities, including some in Illinois, Nebraska, Texas and California, sponsor rebate incentives.

The Austin (Texas) Electric Department's impressive rebate program includes air-conditioner and heat-pump rebates based on size and efficiency of the unit, credits for downsizing cooling equipment, and dealer incentives. For the most efficient central air conditioner, the utility pays $180 per ton of capacity, which works out to around $500 for a typical single-family house. This is three times the rebate offered for the minimum qualifying efficiency, and it covers about one-half the additional cost for the high efficiency unit. Dealers also receive $20 for selling a qualifying unit and the Electric Department offers $45-$125 rebates for heat pump, heat recovery and solar water heaters. For the first six months of the program, the utility estimated a peak demand savings of 1.4 MW at an average cost of $260 per kW.

Springfield (Ill.) City Water, Light and Power offers from $25 to $100 to customers purchasing room air conditioners with an energy efficiency rating (EER) of at least 8.0 and central air conditioners with a seasonal energy efficiency ratio (SEER) of at least 8.5. With these relatively low rebates, the cost of saved capacity is only about $50/kW. The utility estimates the rebate program could reduce its peak demand by 15 to 20 MW by 1992. This would cut projected peak demand growth approximately 20 percent, delaying the need for buying additional $1,000-per-kW generating capacity. The program may expand to other equipment and to the commercial sector.

Last October the Sacramento (Cal.) Municipal Utility District (SMUD) began a conservation incentive program which includes rebates to builders who install efficient central air conditioners and heat pumps in new housing. Builders receive $100 per kW of load reduction, with the kW savings for different efficiency levels estimated from computer simulations of typical buildings. SMUD is also considering rebates for the replacement market and for efficient lighting.

Many electric utilities provide financing for residential weatherization measures such as adding ceiling or wall insulation and storm windows. Some offer subsidized, low-interest loans. It makes sense to include highly efficient equipment in a utility financing program since, for major appliances, the most efficient models can cost up to $1,000 more than average models. Readily available and/or subsidized financing could help overcome the resistance many consumers have to making this extra investment. (Editor's Note: APPA is collecting information on utility financing of end-use equipment. For more information write Karen Anderson at APPA.)

The Tennessee Valley Authority (TVA) offers financing for residential energy efficiency measures including heat pumps and, beginning in October 1982, heat pump water heaters (HPWH). Loans for these products, offered through the local utilities, are generally issued at the market rate available to the power authority. This is considerably below standard consumer borrowing rates. In the first month of the HPWH offer, more than 40 local utilities agreed to participate in TVA's program.

What Else Should be Done?

- Rebate incentive programs appear to be cost effective for utilities, with the benefits of investments in end-use efficiency shared

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by purchasers and ratepayers in general. Only a small fraction of the nation's publicly and privately owned utilities now offer rebate programs. Institution of rebate programs on a national scale could result in substantial savings. If half the central and room air conditioners purchased in the next 20 years qualify for rebates, total savings in electric demand could be 18,000 MW, equivalent to the delivered power from 30 large power plants.

'Efficiency ratings of air conditioners and other appliances need to become as well understood as automobile miles per gallon.'

- It may be useful to target rebates at those who play a major role in product selection but do not operate the equipment — builders, rental property owners, and heating, air conditioning and plumbing contractors. In addition, widely available financing for high first cost products at attractive interest rates should be helpful.
- Although initial results of rebate programs appear encouraging, more analysis is desirable. In particular, there is a need to evaluate the *incremental* quantity of purchases of high-efficiency equipment after rebates begin, the cost per saved kW or kWh from *incremental* purchases of high efficiency equipment, and rebates' effect on total product sales and use.
- Early retirement of inefficient products and replacement with highly efficient models can be cost effective for consumers even without a subsidy. Utilities could promote this practice and, if necessary, provide some added financial incentives. For example, Pacific Gas and Electric Co. pays customers $25 to donate older or underused refrigerators to a charity. The charity is given $20 if it makes the unit inoperable. This helps remove inefficient refrigerators from the operating stock.
- Many utilities and private firms perform energy audits in existing residences. Sometimes they examine space- and water-heating equipment and, if necessary, recommend or perform a furnace "tune-up" or water-heater insulation wrapping. An auditor could also provide homeowners appliance rating sheets indicating appliance efficiency and the cost effectiveness of replacement with highly efficient models. It may take some time for the efficiency ratings of air conditioners and other appliances to become as well understood as automobile miles per gallon, but it is a necessary step toward a more efficient marketplace.
- Consumers are not the only group in need of information on energy-efficient equipment. Utilities require techniques and data for integrating efficient appliances into their planning models. Utility officials need information on appliance program costs and benefits including energy savings, participation levels, and the impact of efficient appliances on demand.

In summary, a massive shift to energy-efficient residential equipment will require somewhat new perspectives on the part of both consumers and utilities. Consumers need to view equipment as investments with an emphasis placed on the life-cycle cost. Utilities need to view themselves broadly as "energy service" organizations — helping their customers obtain service (not electricity or fuel) at the least cost. This new perspective is well-recognized by APPA. (See "Strategies for the Future," by Alex Radin, November-December 1982 PUBLIC POWER, p. 6.) Moreover, through its Demonstration of Energy-Efficient Developments (DEED) program and other means, APPA could assist publicly owned utilities which want to move in this direction by implementing appliance-efficiency programs. Everyone stands to gain. ✷

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Photo by I. Wilson Baker

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If the poor can't pay. . .

Mounting utility customer debt points up a growing crisis, especially among low-income persons, as another heating season approaches.
Photo by College of Public and Community Service, University of Massachusetts, Boston.

by JOEL F. EISENBERG, MEG POWER and JERRY L. PFEFFER

LAST WINTER THE MEDIA focused on problems faced by growing numbers of households entering the winter heating season without utility service because of nonpayment of bills. More recent articles have noted the mounting level of debt accumulated by even larger numbers of residential customers, who face termination once recently enacted legal protection against winter shutoffs begin to lapse.

In response to these concerns, linked in many cases to escalating natural gas prices, several states issued new emergency orders prohibiting shutoffs during the heating season. These emergency orders were in addition to moratoria on service terminations during the winter months which had previously been enacted in many states or adopted on a voluntary basis by utilities.

Power and Eisenberg, partners in an Arlington, Va. energy and regulatory policy consulting firm, previously served in senior congressional staff positions. Pfeffer is executive vice president of NPS Energy Management, Inc., a New York- and Washington-based economic and financial consulting organization serving the utility and energy industries. He previously served as assistant administrator for utility systems in the U.S. Department of Energy.

Escalating natural gas prices following enactment of the 1978 Natural Gas Policy Act are the principal cause of delinquent utility bills and service terminations. Natural gas prices increased 144 percent from 1977 to 1982. Over the long term, however, the growing problem of service terminations and bad debt is comparable for both electric and gas residential service.

(See related column, "Are Your Policies Fair to the Poor?" p. 80.

Not only are electricity prices also steadily rising: many households whose gas service is terminated turn to more costly electric space heating. Their inability to pay for gas is soon reflected in inability to pay dramatically increased electric costs. In simple terms, the problem is common to all energy forms and stems from rising fuel prices and the lack of adequate financial resources in a growing number of households, a problem exacerbated by economic recession and unemployment.

Termination Data Unreliable

No reliable information is available on the critical dimensions of the residential service termination problem. Only Pennsylvania has comprehensive statewide data showing how many terminated residential accounts represent households still desiring reconnections. Not a single state or major utility knows exactly how many terminated customers find ways of receiving service under alternate account names or join the increasing ranks of desperate customers involved in theft of service. Few utilities have tried to determine the ability to pay among terminated accounts seeking reconnection.

Since many utilities and regulatory commissions do not maintain long-term records of terminations and subsequent reconnections, it is difficult to estimate whether the number of households whose service is terminated without subsequent reconnection is changing over time. For example, a recent study of several natural gas utilities in those states hardest hit by natural gas price increases showed a 46 percent increase in service terminations between 1980 and 1982, and a very slight decrease in the percentage of those households which were subsequently reconnected.

The dramatic problem of service terminations has disguised even more alarming trends in delinquent accounts. Mounting utility customer debt points to a coming crisis; in a growing number of households cumulative debt to electric and gas utilities exceeds long-term ability to pay.

For example, a recent survey of delinquent bills and moratoria was published in late 1982 by the Edison Electric Institute (EEI) and American Gas Association (AGA). The study examined the scope of the problem in 34 utilities in as many states and determined that 24 of the 34 companies experienced a significant increase in their ratios of net uncollectibles to revenues between 1977 and 1981.

Winter Shutoffs Limited

Over the past few years, virtually all public utility commissions have addressed the service termination issue. The majority restricted utility curtailments of electric and gas service to residential customers during the winter months (typically defined as Nov. 15 to April 15).

In many cases, these actions were linked to proceedings first initiated under Title I of the Public Utility Regulatory Policies Act of 1978 (PURPA) which required state commissions and nonregulated utilities to *consider* a number of regulatory standards, including one on procedures relating to service termination. Additional moratorium regulations are under study by commissions or legislatures in other states and in Congress.

The stated purpose of these restrictions is prevention of hardship, illness and even death when cold weather threatens the health and welfare of highly vulnerable populations, such as the elderly living on fixed-incomes. In most states such restrictions offer less than absolute protection.

For example, some rules apply only during periods of unusually low temperatures. Others permit utilities to establish the terms of notification and repayment plans; still others permit termination only after notice to and/or approval of the local regulatory agency. Most states guarantee customers an extended opportunity to dispute reasons for termination and negotiate a solution to payment problems with their utility *prior* to termination.

Regulatory Solutions Questioned

Questions as to whether existing moratorium provisions are equitable, cost-effective and adequate to protect those most in need have been raised both by utilities and consumer groups. Several significant issues regarding the financial consequences of "blanket" termination moratoria, shutoff and reconnection guidelines and other consumer protection provisions are involved.

For example, many electric and gas companies contend absolute restrictions on shutoffs that do not consider customer ability to pay are a principal cause of their growing number of delinquent accounts. They note that mounting uncollectibles are adversely affecting the large percentage of residential ratepayers who manage to keep their accounts current and must absorb the growing burden of bad debt. Both electric and gas utilities suspect some customers able to pay are taking advantage of moratoria and thus imposing unjustified costs on other customers. In the survey conducted by EEI and AGA, more than 50 percent of the companies responding reported a pattern of worsening bad debt, from 1979 to 1981, which they attributed in part to state-imposed moratorium regulations.

Consumer representatives, on the other hand, are concerned that if the numbers of delinquent accounts and bad debts continue to escalate, the large majority of customers who *do* pay their bills may create political pressures which will ultimately force elimination of such subsidies even though certain low-income customers need protection.

Additionally, when the moratorium ends many of the most vulnerable customer groups, such as the elderly and poor, still lack funds to pay delinquent accounts. They thus risk termination of service from the end of the winter through the start of the next moratorium. This may occur even when the moratorium is linked to low-income energy assistance and other social welfare and public assistance mechanisms (a linkage not readily apparent in many jurisdictions).

Funding for these assistance programs, which already had failed to keep pace with fuel price increases, has been threatened by federal budget cuts and rising numbers of applicants. Indeed, some regulators and utilities voice concern over a new class of "seasonal customers" — a growing population that remains without service during the warmer months and secures reconnection for the winter season under favorable moratorium rules. This cycle of disconnections and reconnections provides dramatic evidence of the degree to which moratoria alone cannot resolve the problem of growing number of customers unlikely to regain a "current status" on the increasing amounts they owe to electric and gas utilities.

What Payment Is Accepted?

Many states recently issued new rules governing reconnection of service to households which remained disconnected for non-pay-

The typically short line (left) at the window where utility customers pay their bills contrasts sharply with the long line (right) where customers facing disconnection seek help from credit counselors. Photos by Memphis (Tenn.) Light, Gas and Water Division

'Not a single state or major utility knows exactly how many terminated customers find ways of receiving service under alternate account names or join the increasing ranks of desperate customers involved in theft of service.'

ment as winter began. Two questions typically emerged as these rules were considered by regulatory agencies and utilities:

First, how much less than the total amount owed can a utility be required to accept as a condition of providing continued service — in the case of both the customer with a cumulative delinquent account and the customer who simply cannot afford to pay current charges?

Second, how can the rules governing moratoria and reconnections be structured to increase the likelihood the utility eventually receives the full balance due?

While approaches adopted by regulators and utilities vary, the rules generally assume the utility *will* ultimately collect the full amount owed even if extended payment plans are required to secure full payment. Most states permit eventual termination of those customers who fail to comply with the negotiated agreement.

A typical repayment rule, recently adopted in Missouri, requires a customer who cannot pay an overdue account in full to deposit the lesser of $75 or 25 percent of the amount due. The customer can then arrange to pay the balance at the rate of one-eleventh of the outstanding balance per month (plus current usage) on a budget plan extending over 12 months. Customers who fail to meet this extended payment schedule may be terminated *even during winter months*.

In a few states maintenance of service during the heating season is virtually assured. Michigan, for example, requires only 7 percent of the balance due to be paid. Pennsylvania requires explicit commission approval of each winter termination, even where a customer has violated terms of an extended payment schedule.

Last winter the Kansas State Corporation Commission said terminated customers must be reconnected upon request and demonstration of "good faith." The Kansas commission noted that a good faith attempt included: notifying the utility of the customer's inability to pay in full; application by the customer for financial assistance (federal, state or local); and paying a minimum of 25 percent of the amount owed for utility service during the most current billing period, or $30, whichever is less. The Kansas reconnection standard, however, does not relieve gas and electric customers of their obligation pay past, current or future charges for utility service.

Several states have sought to link their moratorium programs to the federal low-income energy assistance program. Some have set their minimum reconnection payment requirements at levels comparable to average monthly payments under federal programs. For example, Maine, Ohio and Michigan use federal eligibility as the basis for automatic eligibility for protection under state moratorium rules. In Michigan up to $650 of the eligible household's bill is paid directly to the utility at the end of the moratorium period to assure continuing service.

Day of Reckoning Postponed

Our recent analysis of 10 gas distribution utilities in several eastern and midwestern states with moratoria in effect showed major increases in the number and extent of delinquent residential accounts. Accounts in arrears increased an average of 16 percent over the past two years while those in arrears 60 days or more increased 35 percent. For the 10 utilities examined, the average amount owed increased 88 percent in the same period, to an average of $218 per household.

1982-83 Typical Costs of Natural Gas Reconnection and Payment Plans

Balances Owed to Gas Utility*	OHIO	ILL.	MINN.	WIS	KY.
Average Overdue Balance	$278	$210*	$556	$332	$298*
Down Payment Required on Overdue Balance	93	70	93	200	Negot.
Minimum Monthly Payment Required on Overdue Balance	21	18	43	Negot.	Negot.
Average (current) Winter Monthly Bill**	78	113	134	131	98
Average Monthly Income (Poverty Family of 4)	828	828	828	828	828
Average (1983) Energy Assistance Benefit***	175	183	485	310	223

*Average for all household in arrears.

**1981-82 consumption and arrearage levels; 1982-83 prices.

***Survey by Department of Health and Human Services, March 1983.

Source: Eisenberg and Power, "Energy Debt: The Coming Crisis for the Poor," National Consumer Law Center, Boston, Mass., April 1983.

The utilities involved do not attribute their bad debt problem primarily to regulatory moratoria on service termination. However, these figures suggest *moratoria offer no long-term solution to the underlying economic and social problems reflected in the growing levels of service termination and bad debt. Rather, such regulatory actions provide a short-term remedy while postponing the day of reckoning for both utilities and low-income consumers.*

Newly adopted termination, reconnection and extended-payment rules developed in response to moratoria problems also have unknown impacts. Virtually no data are available on characteristics of customers using extended-payment plans or the plans' relative effectiveness. However, a cursory examination of the numbers relating to a few typical state plans suggests that participating households may not be well served over the long-term by such repayment schemes.

As the accompanying table shows, in no case did the average energy-assistance benefit for 1982-83 cover the total overdue balance accumulated by the average terminated household. These arrearages are those reported by gas utilities for households disconnected for non-payment. This means a low-income household's own scarce resources must cover the costs of all current energy usage plus some portion of the previous year's overdue balance.

Yet, extended payment plans established by state regulatory commissions in the states surveyed typically require the low-income households to allocate more than 10 percent of gross monthly income to utility services. In Minnesota, the average low-income household must dedicate at least 22 percent of income for heating costs alone over the winter months. The (non-heat) electric utility costs must be added to these figures of anticipated energy expenditures and accumulated debt. Clearly, the absolute balances remaining from which the low-income customer must cover essential living costs are unrealistically low.

In summary, it appears that existing regulatory policies have not protected a growing

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Rapidly escalating gas prices may foment more citizen protest than electric rate increases do, but the economic strains on low-income customers are evident among both electric and gas heating customers. Photo by Citizen/Labor Energy Coalition

segment of low-income residential customers from rapidly accumulating debt to energy utilities. For many customers, one cooling or heating season begins before the prior season's debts have been paid, creating a new cycle of disconnects and reconnects.

While most case studies and analyses are based on gas industry data, they have equivalent meaning for both private and public electric utilities. The economic strains on low-income customers attempting to meet their growing utility bills do not distinguish between fuel types and are evident among both electric and gas heating customers.

Munis Can't Shift Responsibility

From a utility perspective, the difficult issue of service terminations and bad debts is magnified when the system is publicly owned and self-regulated. The dual problems of rising energy prices and customer inability to pay do not respect distinctions in system ownership. The utility response to these problems, however, must take on a somewhat different character in the context of a municipal or other government utility.

The initial response of most investor-owned and publicly owned systems to customers' inability to pay rising energy prices is to seek a negotiated solution in the form of extended payment plans. For low-income customers, however, some form of financial assistance from a combination of public and private sources may be crucial. The investor-owned utility may serve as a "referral agency" to such assistance programs, but feels that the responsibility for meeting essential customer needs must ultimately shift to local government.

'Participating households may not be well-served over the long term by typical extended-payment schemes.'

The publicly owned system, however, is in a considerably more difficult position since it *already is a governmental entity* and cannot evade ultimate responsibility by shifting the problem to the public sector. The argument that "social welfare and low-income assistance is not *our* business" is much less credible when voiced by a publicly owned system.

The issue has little to do with the fact that such systems are independent agencies of the municipality, must operate in a "businesslike manner," or must be financially self-sustaining. Rather, in a political sense, the ultimate responsibility for meeting essential customer needs may be vested by default with the municipal power system if other agencies or government fail to act on a timely basis to provide supplemental assistance to low-income customers threatened with shutoffs. This reality was illustrated this past winter in Seattle, Wash., (which has no statewide termination moratoria). After growing numbers of shutoffs and critical media coverage, the mayor of Seattle intervened and directed the management of the municipal utility system to review each case personally and ease credit policies.

While the shutoff problem has been especially severe among gas utilities, electric power systems, especially the large number of publicly owned systems in the Tennessee Valley and Pacific Northwest, will soon confront similar difficulties. Utility customers in both regions face several problems:

- rapid escalation in electricity prices resulting from the cost of new thermal power plants;
- a relatively high percentage of electric resistance and space heating systems;
- poorly insulated homes linked to historically low electricity prices;
- high levels of poverty and unemployment which have worsened as a result of the recent economic recession; and
- reduced levels of federal welfare benefits and pressures on states to maintain program funding even at existing levels.

Conservation and home weatherization programs are helpful in reducing monthly energy costs but will be inadequate, in most cases, to deal with the underlying problem of growing customer inability to pay rising energy bills.

Options for the Future

There is sufficient experience with alternative moratorium and repayment systems to evaluate their effectiveness in protecting the most vulnerable households. The effect of alternative eligibility criteria and termination-reconnection rules on delinquent accounts can also be assessed to guide both regulators and utility collection departments in the design of such measures.

Utilities' consumers-service and account-collection practices should also be reviewed to determine the most effective approach for securing a steady flow of payments from even those households experiencing severe economic stress. For example, on the basis of an extensive internal analyses of service termination and debt collection problems performed in 1980 and 1981, the Pennsylvania Public Utility Commission has been urging utilities subject to its jurisdiction to modify collections practices. Officials in that state contend that early, frequent and clear notification of overdue balances and minimal use of terminations as a routine collection practice are associated with lower numbers of accounts in arrears and a reduction in uncollectible revenues. Similar findings, albeit in a less formal sense, have also been noted by many of the nation's smaller public and cooperative systems. These findings and those of other analytic studies recently completed deserve serious consideration in other jurisdictions.

'The publicly owned system is already a governmental entity and cannot evade ultimate responsibility by shifting the problem to the public sector.'

Funds for low-income energy assistance must be expanded. All major electric and gas utility trade associations have supported continued funding for the federal low-income energy-assistance program which provides aid either in direct cash assistance or payments to utilities and fuel vendors. This program is currently funded at nearly $2 billion annually.

Many utilities, however, have recognized the insufficiency of even these programs in the context of the overall problem and have sought to expand the pool of available resources. Some have made direct contributions and solicited local agencies providing emergency energy assistance to low-income ratepayers.

For example, public power systems in such diverse areas as Memphis, Tenn., Tacoma, Wash., and McPherson, Kan., have programs where ratepayers can contribute through their utility bills to local charities providing low-income energy assistance. Some utilities have provided direct cash contributions or matching assistance to funds contributed by ratepayers. Investor-owned utilities in Maryland, Missouri and Arkansas have actively solicited funds from the local business community to supplement resources available from federal low-income assistance programs.

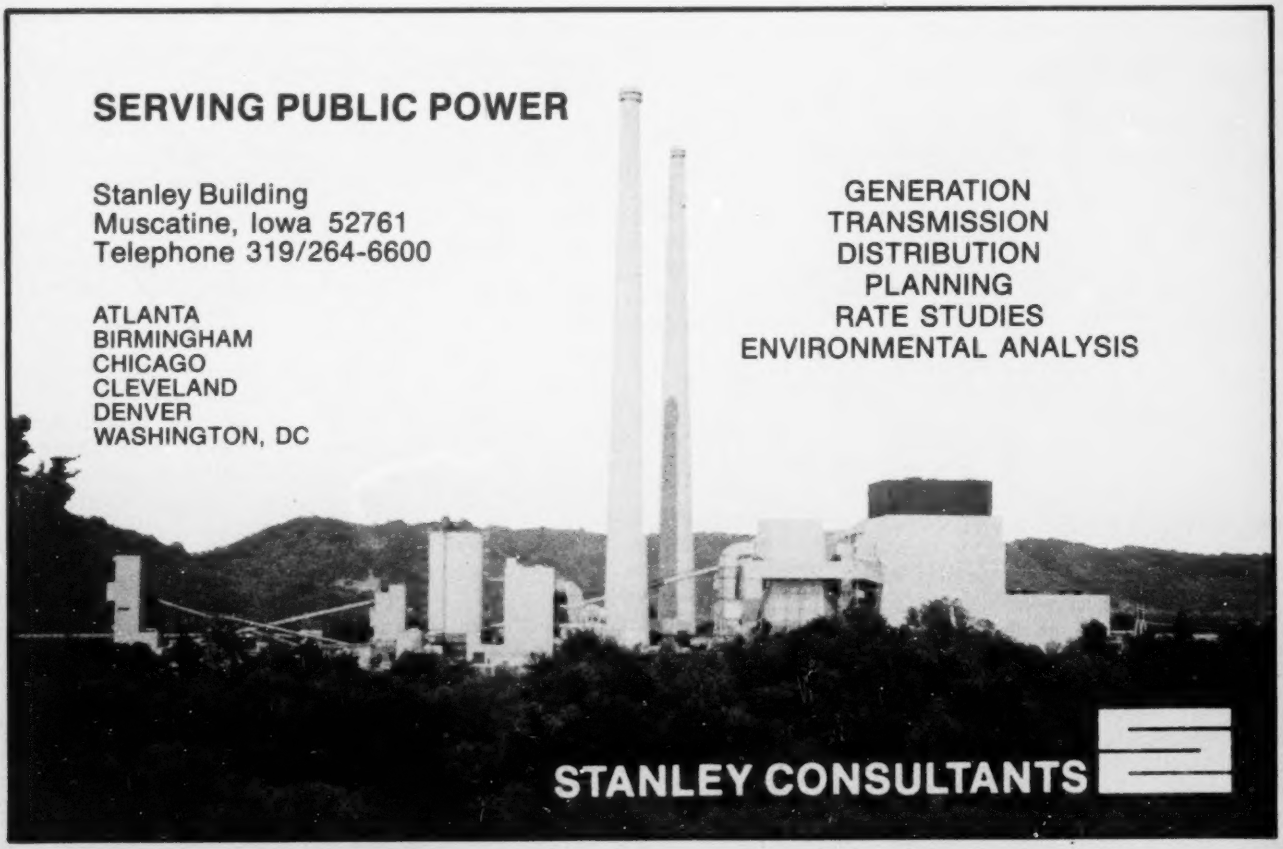
Some utilities seek expanded rate discounts (e.g., lifeline rates) offered in some jurisdictions to low-income customers. For example, a Rhode Island electric utility has requested regulatory approval to offer discount rates to customers who have lost their jobs and exhausted their unemployment benefits. West Virginia recently enacted a statewide 20 percent discount in electric and gas rates during the winter months for low-income customers. Funding for the West Virginia program will come from state tax revenues and appropriated funds rather than directly from utility revenues.

The utility industry and state regulators must find new ways to expand the long-term availability and adequacy of financial assistance for that growing number of households which cannot pay for adequate energy supplies from their own resources. Moratoria alone are necessary but insufficient to deal with the problem. The alternative to adequate public assistance is to impose an increasing financial burden on the utility system and its other customers, where a majority of ratepayers are forced to pay the bills for a growing minority who don't.

Reflecting the growing concern and frustration with this issue, the Michigan Public Utilities Commission noted in an emergency order adopted in November 1982:

"The commission would be remiss if it did not make mention of the failure of the legislative end of the federal government to provide adequate protection for economically disadvantaged citizens. . . . The commission, acting within the scope of its authority, can only require the implementation of quick-fix, band-aid solutions to these problems when it is clear that the legislative process has failed . . ."

The long-term solution is uncertain. What is clear, however, is that the problem may soon reach crisis proportions unless new and innovative approaches are successfully adopted through joint efforts of utilities and responsible government agencies. ✹



SERVING PUBLIC POWER

Stanley Building
Muscatine, Iowa 52761
Telephone 319/264-6600

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